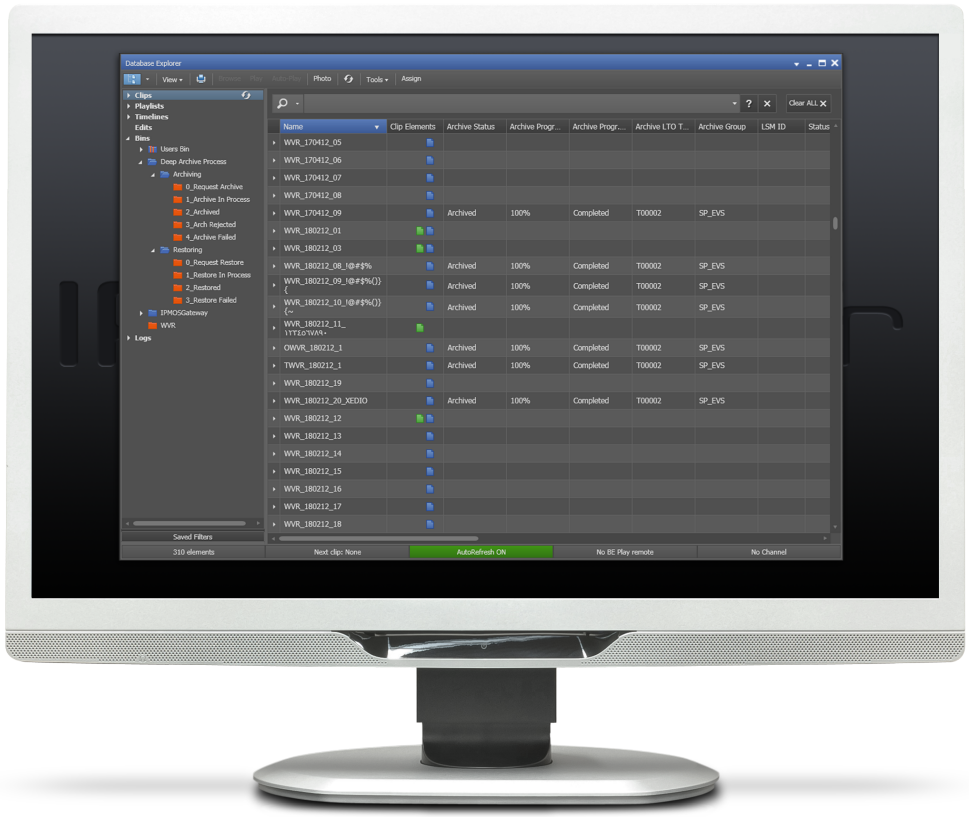
USER MANUAL

DEEP ARCHIVE SYNC

Version 1.5 - March 2015



IP2Archive

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Table of Contents

TABLE OF CONTENTS III

WHAT'S NEW V

1. ABOUT THE APPLICATION 1

2. INSTALLING THE APPLICATION 4

3. STARTING THE APPLICATION 4

3.1. After Installation 4
3.2. After Configuration 5
3.3. Version and License Check 7

4. USER INTERFACE 9

4.1. Main Window 9
4.2. Deep Archive Tab 12
4.3. IPDirector Tab 14

5. SYNCHRONIZING CLIP ARCHIVE METADATA 16

5.1. Synchronization Workflows 16
5.2. Synchronizing Clip Archive Metadata in IPDirector 17
5.2.1. Workflow 17
5.2.2. Searching for Clips in the IP2Archive Database 18
5.2.3. Comparing and Synchronizing Clip Archive Metadata 20
5.3. Synchronizing Clip Archive Metadata with DIVA 27
5.3.1. Workflow 27
5.3.2. Searching for Clips in the IP2Archive Database 27
5.3.3. Comparing and Synchronizing Clip Archive Metadata 28
5.4. Synchronizing the Low-Resolution File 34
5.4.1. Workflow 34
5.4.2. Searching for Clips in the IP2Archive Database 34
5.4.3. Checking and Synchronizing the Low-Resolution Video File 34
5.5. Removing Clip Archive Metadata from IPDirector 40
5.5.1. Workflow 40
5.5.2. Searching for Clips 40
5.5.3. Removing Clip Archive Metadata 40

6. MANAGING GRIDS 41

6.1. Introduction 41
6.2. Manipulating Columns 41
6.2.1. Adjusting the Width of Columns 41
6.2.2. Reordering Columns 42
6.2.3. Adding and Removing Columns 43
6.2.4. Hiding and Unhiding Columns 44
6.3. Copying Data 45
6.4. Sorting Data 45
6.5. Filtering Data 46
6.5.1. Filtering by Values From a Column 46
6.5.2. Filtering by Criteria 47
6.6. Performing Basic Calculations on Data 50
6.6.1. Footers and Basic Calculations 50
6.6.2. Performing Basic Calculations on Non-Grouped Data 51
6.6.3. Performing Basic Calculations on Grouped Data 53
6.6.4. Removing Footers 54
6.7. Printing and Exporting Data 55

7. CONFIGURING THE APPLICATION 56

7.1. Settings Window 56
7.2. Global Settings 58
7.2.1. Overview Global Settings Subcategories 58
7.2.2. General Tab 58
7.3. System Settings 59
7.3.1. Overview System Settings Subcategories 59
7.3.2. Oracle Connection Tab 60
7.3.3. E-Mail Options Tab 63
7.3.4. IPDirector API Tab 65
7.3.5. IP2Archive Bins Tab 67
7.3.6. IP2Archive Metadata Tab 67
7.3.7. DIVA Tab 68

What's New

In the Deep Archive Sync user manual the icon

has been added on the left margin to highlight information on new and updated features.

The changes linked to new features in version 2.1 are listed below.

Added logout function to the File menu.

- See section "Main Window" on page "9".

Deep Archive Sync now supports multiple LTO tape IDs.

- See section "Searching for Clips in the IP2Archive Database" on page "18".

Deep Archive Sync is now compatible with the IPDirector API 06.60.

See section "IPDirector API Tab" on page "65".

1. About the Application

General Description

Deep Archive Sync is an application which allows an administrator to compare the archive metadata of clips in the IP2Archive database with the archive metadata of these clips in the IPDirector or DIVArchive database. It will highlight any differences and allow the administrator to synchronize the databases.

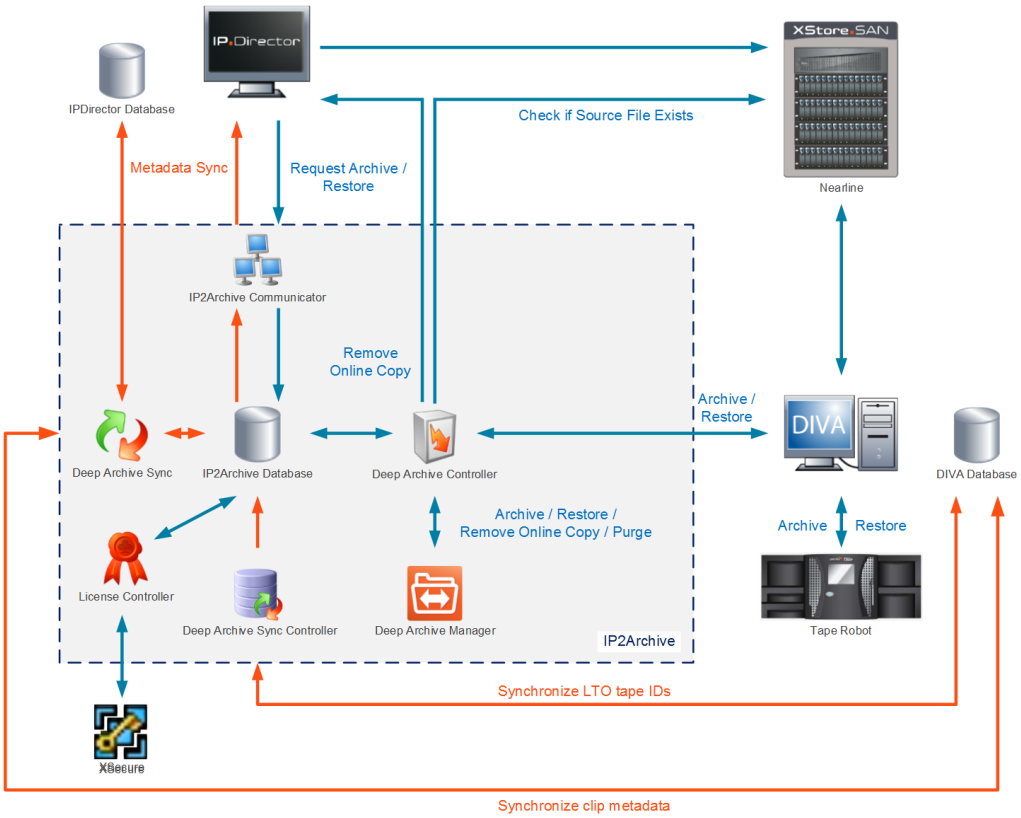
Deep Archive Sync also permits to check the existence and online availability of the low-resolution video files and will suggest the necessary actions to undertake to get the low-resolution video file back online.

Finally, Deep Archive Sync makes it possible to search the IPDirector database for clips with archive metadata that are unknown in the IP2Archive database and to remove this archive metadata from the IPDirector database.

Workflow

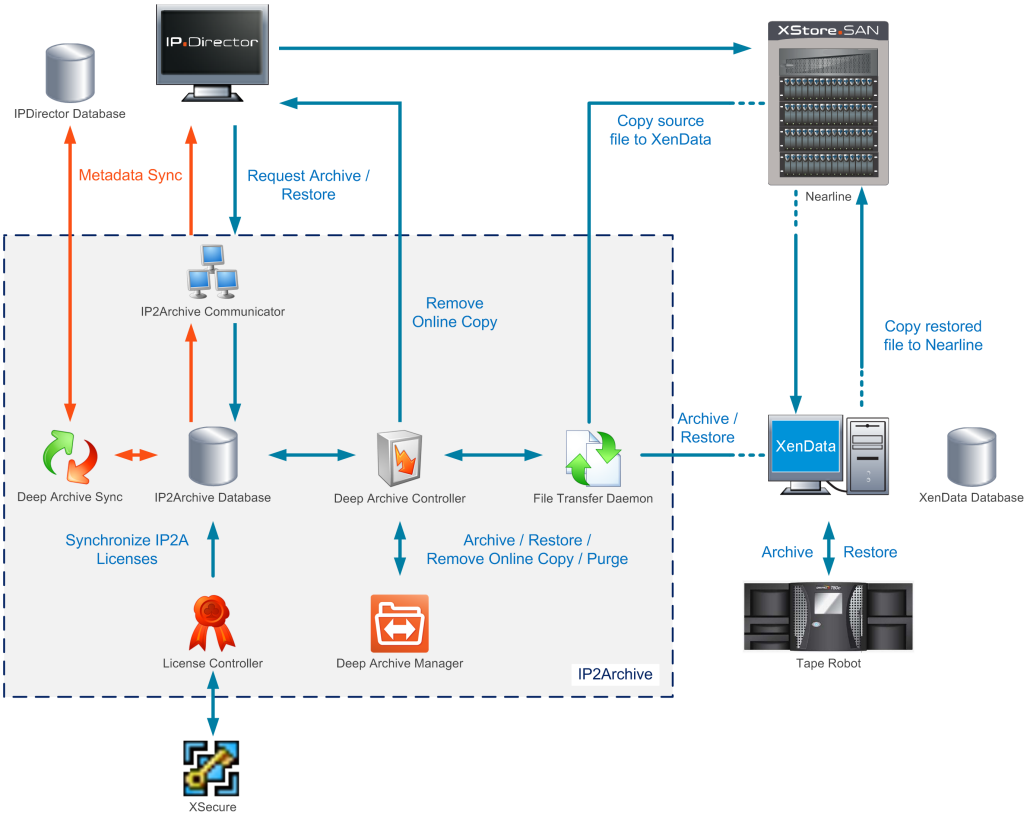
Interfacing with Front Porch Digital's DIVArchive

The diagram below shows the interactions between IPDirector and the various IP2Archive software components, and between the various IP2Archive software components and the HSM system DIVArchive.



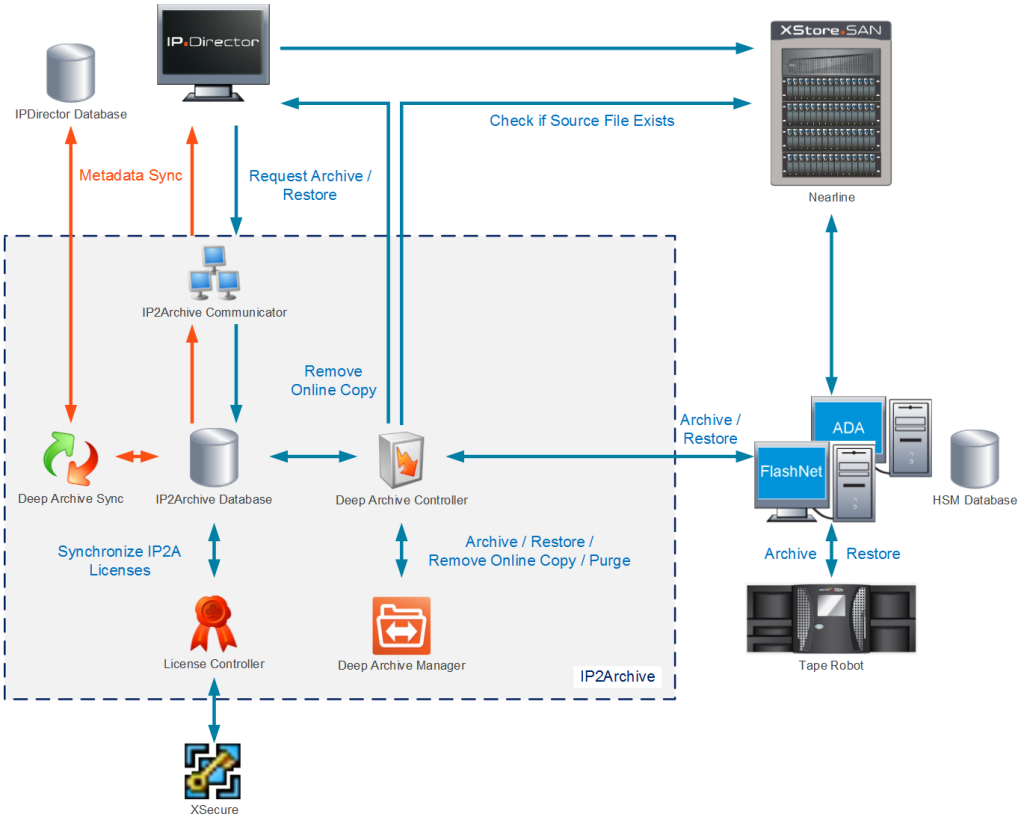
Interfacing with XenData's Digital Archive

When IP2Archive interfaces with XenData's Digital Archive, File Transfer Daemon is used to communicate with the HSM. No synchronization is possible between the IP2Archive database and the HSM database.



Interfacing with SGL's FlashNet and Atempo's Digital Archive

The following diagram shows the interactions between IPDirector and the various IP2Archive software components, and between the various IP2Archive components and SGL's FlashNet or Atempo's Digital Archive. No synchronization is possible between the IP2Archive database and the HSM database.



About Clip Archive Metadata

In IPDirector archive metadata is added to clips by means of specific user fields. They allow a user to monitor the archive progress and status of each clip. The following user fields have been defined in IPDirector:

- Archive Status
- Archive Progress
- Archive Progress Message
- Archive LTO Tape
- Archive Group
- Archive Date
- Retention Date

Deep Archive Sync will check the values in these fields for each clip in the IP2Archive database and compare them with the values in the IPDirector and DIVArchive database.

2. Installing the Application

See the IP2Archive Installation manual for more information on how to install the application.

3. Starting the Application

3.1. After Installation

To start the application after installation, proceed as follows:

1. Double-click the Deep Archive Sync icon on the server desktop to start the application. You can also launch the application by double-clicking the executable file (.exe) in the installation folder.

   The application splash screen appears while the application logs into the IP2Archive database.

   Then, the Settings window appears allowing you to configure the application. See section "Settings Window" on page "56".

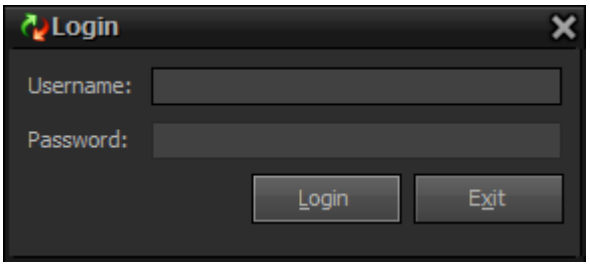
3.2. After Configuration

To start the application after it has been configured, proceed as follows:

1. Double-click the Deep Archive Sync icon on the server desktop to start the application. You can also launch the application by double-clicking the executable file (.exe) in the installation folder.

   The application splash screen appears while the application logs into the IP2Archive database.

   Then, a Login dialog box appears.

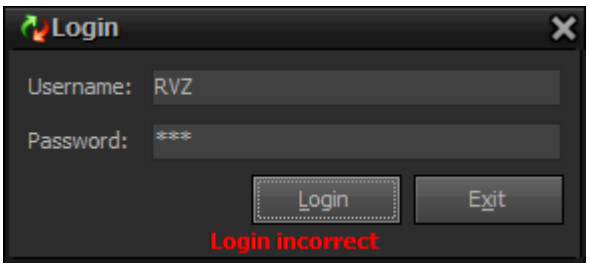
   

   To be able to log into the application, you need to belong to a user group that has a role which allows to use the application.

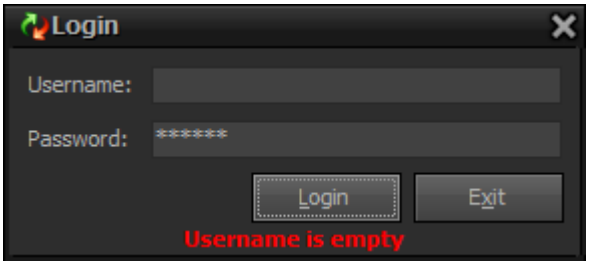
2. Enter your username and password and click **Login**. The main window of the application opens.

You get an error notification if:

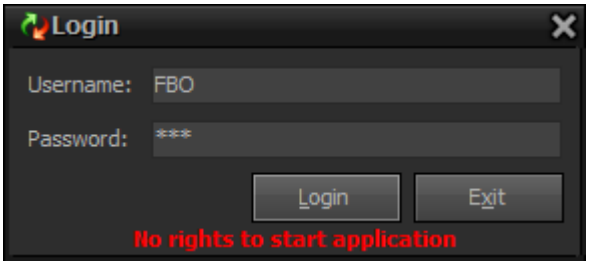
- you have entered a wrong username or password.

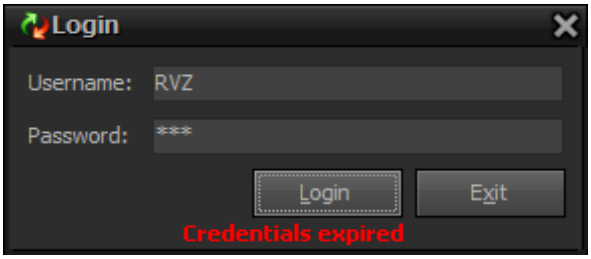
- you have omitted your username.



- you have insufficient user rights.



- your user account has expired.



Warning
If you have lost your password, a new password will have to be set in the Configurator. Contact your system administrator.

3.3. Version and License Check

Introduction

The version of the application and the validity of the application license will be checked when the application logs into the IP2Archive database at startup. The status of the version or the license that is returned is displayed on the application splash screen.

Version and License Statuses

The following version and license statuses can be returned:

Status	Description	Color	Action Required
Current	The actual version of the application.	no color	No action required. The application starts automatically.
Outdated	A newer version of the application exists, but this version can still be used. The application version that should be installed is displayed.	red	Click **OK** to start the application at once. By default, the application starts automatically after 10 seconds.
Obsolete	A newer version of the application exists and must be used. This version may not be used anymore. The application version that should be installed is displayed.	red	Click **OK** to continue. The application shuts down.
Undefined	The version of the application is not defined in the IP2Archivedatabase.	black	Click **OK** to continue. The application shuts down.
Beta	A test version.	blue	Click **OK** to start the application. By default, the application starts automatically after 10 seconds.

Status	Description	Color	Action Required
License About to Expire	The license period is about to expire. It is shown in how many days the license will expire. Contact your system administrator or check the License Controller manual.	orange	Click **OK** to start the application at once. By default, the application starts automatically after 10 seconds.
License Expired	The license period has expired. The date when the license expired is displayed. Contact your system administrator or check the License Controller manual.	red	Click **OK** to continue. The application shuts down.
No Valid License	There was no valid license found in the database. Contact your system administrator or check the License Controller manual.	red	Click **OK** to continue. The application shuts down.
Maximum Licenses Reached	The maximum number of instances <NUMBER OF LICENSES> for the license has been reached. Contact your system administrator or check the License Controller manual.	red	Click **OK** to continue. The application shuts down.

4. User Interface

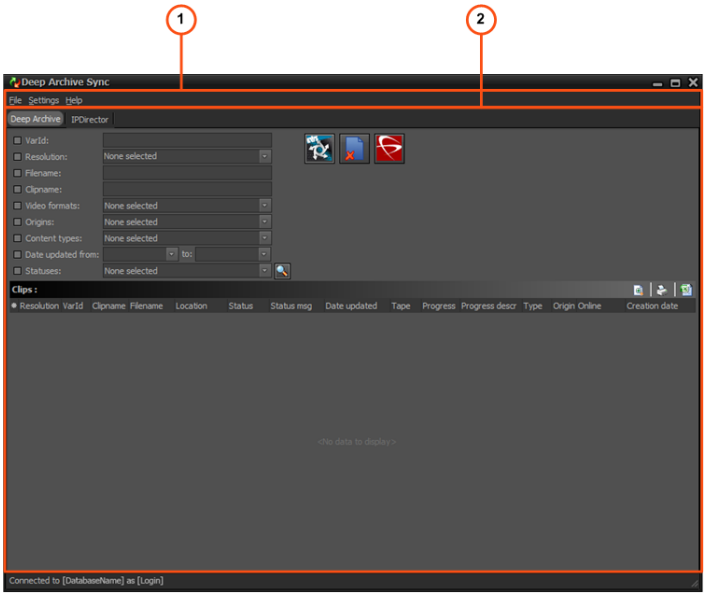
4.1. Main Window

General Description

The main window allows you to search for clips in a particular database, request a comparison of the archive metadata with another database and start the synchronization between the two databases.

Illustration

The main window contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the main window:

Part	Name	Description
1.	Menu bar	The menu bar contains three menus: **File**, **Settings** and **Help**.
2.	Deep Archive tab & IPDirector tab	These tabs allow you to search for clips, request a clip archive metadata comparison between two databases and synchronize the metadata.

NEW !

Menu Bar

The menu bar contains three menus: **File**, **Settings** and **Help**.

File Menu

The **File** menu contains two commands: **Logout** and **Exit**.

Click the **File** menu or use the keyboard shortcut keys **ALT** + **F** or **F10** + **F** to open it.

Click **Exit** or use the keyboard shortcut key **X** to exit the application.

Click **Logout** or use the keyboard shortcut key **O** to log out of the application.

Settings Menu

The **Settings** menu does not contain any commands. It immediately gives access to the application settings. Click the **Settings** menu or use the keyboard shortcut keys **ALT** + **S** or **F10** + **S** to access the settings.

Help Menu

The **Help** menu contains the following commands: **Help**, **Context-Sensitive Help** and **About**.

With the **Help** command you can open the application help file.

With the **Context-Sensitive Help** command you can turn on or off the context-sensitive help mode. In context-sensitive help mode, when you click a user interface item, help for that item is displayed. You can also turn on or off context-sensitive help mode by pressing **F1**.

With the **About** command the application about box can be opened. The about box displays the application software version, the date until which the application license is valid, the name and version of the database the application is logged on to and the login name used.

Click **About** or use the keyboard shortcut key **A** to open the application about box.

Deep Archive Tab

The Deep Archive tab allows you to search for clips in the IP2Archive database and compare their archive metadata with the metadata found in the IPDirector or DIVArchive

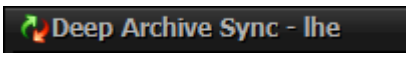
database and start the synchronization process for one or more clips. It also permits you to check in the IPDirector database the existence and online availability of the low-resolution video file. See section "Deep Archive Tab" on page "12".

IPDirector Tab

In the IPDirector tab you can search for clips in the IPDirector database that have archive metadata but that are unknown in the IP2Archive database. You can remove this archive metadata from the IPDirector database. See section "IPDirector Tab" on page "14".

Username

The username of the person that is currently logged in is displayed next to the application title.



4.2. Deep Archive Tab

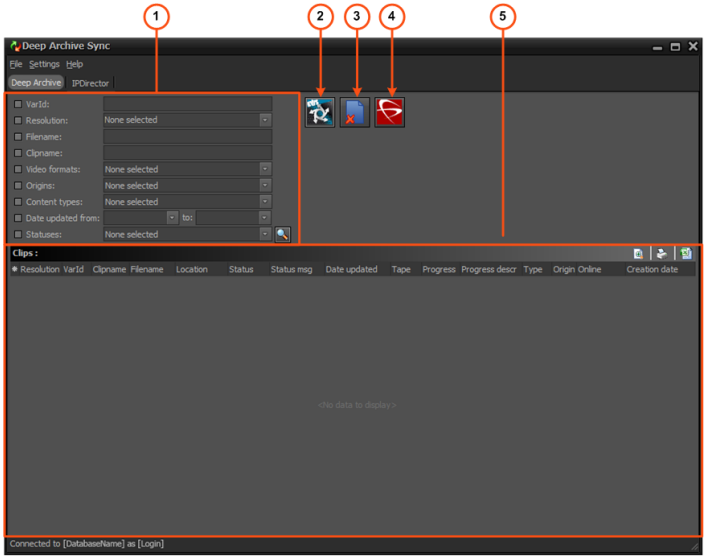
General Description

The Deep Archive tab allows you to search for clips in the IP2Archive database, compare their archive metadata with the metadata found in the IPDirector or DIVArchive database, and synchronize the databases if necessary and if possible.

It also allows you to check if the low-resolution video file of clips exists in the IPDirector database and if it is available online or not.

Illustration

The Deep Archive tab contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Deep Archive tab:

Part	Name	Description
1.	Search pane	The Search pane allows you to search for clips in the IP2Archive database using one or more search criteria. See section "Searching for Clips in the IP2Archive Database" on page "18".
2.	Compare with IPDirector button	The **Compare with IPDirector** button allows you to compare the archive metadata of the clips found in the IP2Archive database with the IPDirector database. See section "How to Request a Comparison with IPDirector" on page "20".

Part	Name	Description
3.	Check Lores button	The **Check Lores** button allows you to check the IPDirector database for the existence of the low-resolution file for particular clips. See section "Synchronizing the Low-Resolution File" on page "34".
4.	Compare with DIVA Button	The **Compare with DIVA** button allows you to compare the archive metadata of the clips found in the IP2Archive database with the DIVArchive database. See section "Synchronizing Clip Archive Metadata with DIVA" on page "27".
5.	Search Results pane	The Search Results pane displays the clips from the IP2Archive database that correspond to the search that was performed.

Note
Depending on your user rights, the **Compare** buttons will be available or not.

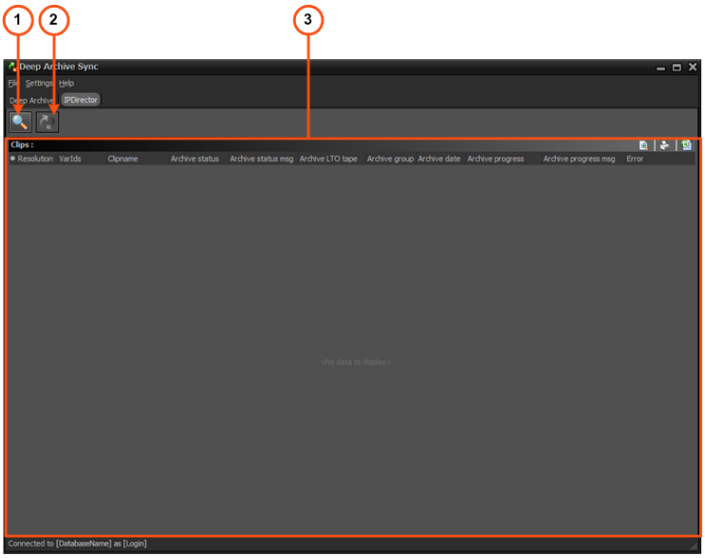
4.3. IPDirector Tab

General Description

The IPDirector tab allows you to search for clips in the IPDirector database that have archive metadata but that are not known in the IP2Archive database in order to remove their archive metadata from the IPDirector database.

Illustration

The IPDirector tab contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the IPDirector tab:

Part	Name	Description
1.	Search button	The **Search** button allows you to search for clips in the IPDirector database.
2.	Remove Metadata for Selected Clips button	The **Remove Metadata for Selected Clips** button allows you to start the removal of the archive metadata of the selected clips from the IPDirector database. See section "Removing Clip Archive Metadata from IPDirector" on page "40".
3.	Search Results pane	This pane displays the clips that have archive metadata, but that do not exist in the IP2Archive database.

Note
Depending on your user rights, this tab will be available or not.

5. Synchronizing Clip Archive Metadata

5.1. Synchronization Workflows

You can perform four synchronization workflows in Deep Archive Sync:

- You can synchronize the archive metadata of one or more clips in the IPDirector database with the archive metadata of the same clips in the IP2Archive database.
- You can synchronizes the archive metadata of one or more clips in the IP2Archive database with the archive metadata of the same clips in the DIVA database.
- You can check if the low-resolution video file of one or more clips exists in the IPDirector database and is online or not.
- You can search for clips with archive metadata in the IPDirector database that do not exist in the IP2Archive database in order to remove the archive metadata from the IPDirector database.

5.2. Synchronizing Clip Archive Metadata in IPDirector

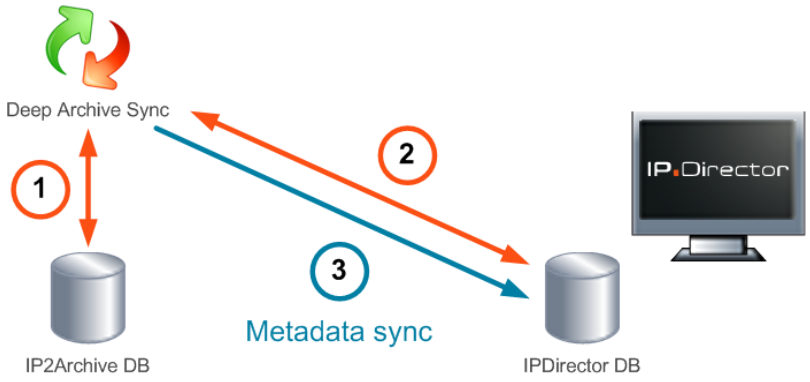
5.2.1. Workflow

To synchronize the archive metadata of clips in the IPDirector database with the archive metadata of the same clips in the IP2Archive database, proceed as follows:

1. Open the Deep Archive tab of Deep Archive Sync and search for specific clips in the IP2Archive database using the available search criteria.
2. In the Deep Archive tab, request a comparison between the archive metadata of the clips that were found in the IP2Archive database with the same clips in the IPDirector database.

   Deep Archive Sync performs a comparison through the IPDirector API. The Synchronize IPDirector Metadata window displays the result of the comparison.
3. In the Synchronize IPDirector Metadata window, select the clips whose archive metadata can be synchronized and start the synchronization process.

   The archive metadata in the IPDirector database is synchronized with the archive metadata in the IP2Archive database. The content of the archive and restore bins in IPDirector is also synchronized.



5.2.2. Searching for Clips in the IP2Archive Database

Search Pane

The Search pane of the Deep Archive tab allows you to search for clips in the IP2Archive database based on a number of search criteria, which can be combined to pinpoint exactly the clip or clips that you need.

Search Criteria

You can search for clips in the IP2Archive database using one or more of the following search criteria:

Search Criterion	Description
VarID	A 32-character ID with variable length and format. It is automatically assigned to new clips in IPDirector. It is mainly used to ensure redundancy on the system.
Resolution	The resolution of the video file(s) attached to the clip: 'HIRES' or 'LORES'. By default, 'None Selected' is entered.
Filename	The name of a video file attached to the clip.
Clipname	The name of the clip.
Video Formats	The format of a video file attached to the clip. Multiple formats can be selected. By default, 'None Selected' is entered.
Origins	The application from which the request to archive or restore the clip was issued. For example, IPDirector. Multiple origins can be selected. By default, 'None Selected' is entered.

Search Criterion	Description
Content Types	The type of content of the clip. For example, 'Teaser'. Multiple content types can be selected. By default, 'None Selected' is entered.
Date Updated From To	The date or period when the archive status of the clip was last updated in the Deep Archive Manager.
Statuses	The archive status of the clip. For example, 'Archive Candidate', 'Refused', 'Archived'. Multiple archives statuses can be selected. By default, 'None Selected' is entered.

The search criteria can be combined to narrow down the search results.

How to Perform a Search

To perform a search, proceed as follows:

1. Enter (part of) the name or ID in the corresponding text field and/or select the desired value(s) from the drop-down list or date picker.

   The corresponding check box is automatically selected.

2. Click the **Search** button to start the search.

   The clips that match your search query are displayed in the Search Results pane.

Search Results Pane

The Search Results pane displays the clips that match your search query. The clips can be filtered and also sorted in ascending or descending order. For reporting purposes, you can print the list of clips or export them to Excel. See section "Managing Grids" on page "41" for more information.

Search Results

NEW !

The clips in the Search Results pane are displayed with the following information:

Clip Information	Description
Clipname	The name of the clip.
Creation Date	The date and time when the clip appeared in Deep Archive Manager as archive candidate.
Date Updated	The date and time when the archive status of the clip was last updated in Deep Archive Manager.
Filename	The name of the video file attached to the clip.

Clip Information	Description
Group	The name of the LTO tape group.
Location	The path of the storage location of the video file.
Online	The icon that indicates if the video file is online or not. • A green icon ( ) indicates that the high-resolution file is online. • A blue icon ( ) indicates that the low-resolution video file is online. If the high- or low-resolution video file is offline, i.e. not available on the nearline storage, no icon is displayed.
Origins	The application from which the request to archive or restore the clip was issued. For example, IPDirector.
Progress	The progress of the archive, remove online copy, restore or purge process.
Progress Description	The message that describes the progress.
Resolution	The icon that indicates resolution of the video file attached to the clip: 'HIRES' ( ) or 'LORES' ( ).
Source VarID	The VarID of the parent clip in IPDirector. This only applies to partially restored clips.
Status	The archive status of the clip.
Status Message	The automatically generated message that details the archive status of the clip.
Storage	The name of the hierarchical storage management system.
Tapes	The ID of the main and possible backup LTO tape(s) on which the video file has been archived.
Type	The type of content of the clip. For example, 'Teaser'.
VarID	A 32-character ID with variable length and format. It is automatically assigned to new clips in IPDirector. It is mainly used to ensure redundancy on the system.

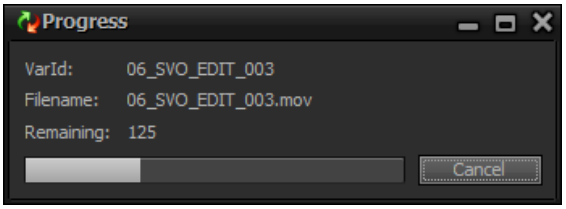
5.2.3. Comparing and Synchronizing Clip Archive Metadata

How to Request a Comparison with IPDirector

Once you have searched for the desired clips in the IP2Archive database, you can request to compare the archive metadata with the archive metadata of the clips in the IPDirector database.

To start the comparison, click the **Compare with IPDirector** button .

A dialog box appears displaying the VarID of the clip and the name of the attached video file that is being processed by Deep Archive Sync. It also displays the remaining clips and the progress of the process.



Note
You can only synchronize the archive metadata of high-resolution video files. A warning appears if you request a comparison with IPDirector for clips with a low-resolution video file.

Synchronize IPDirector Metadata Window

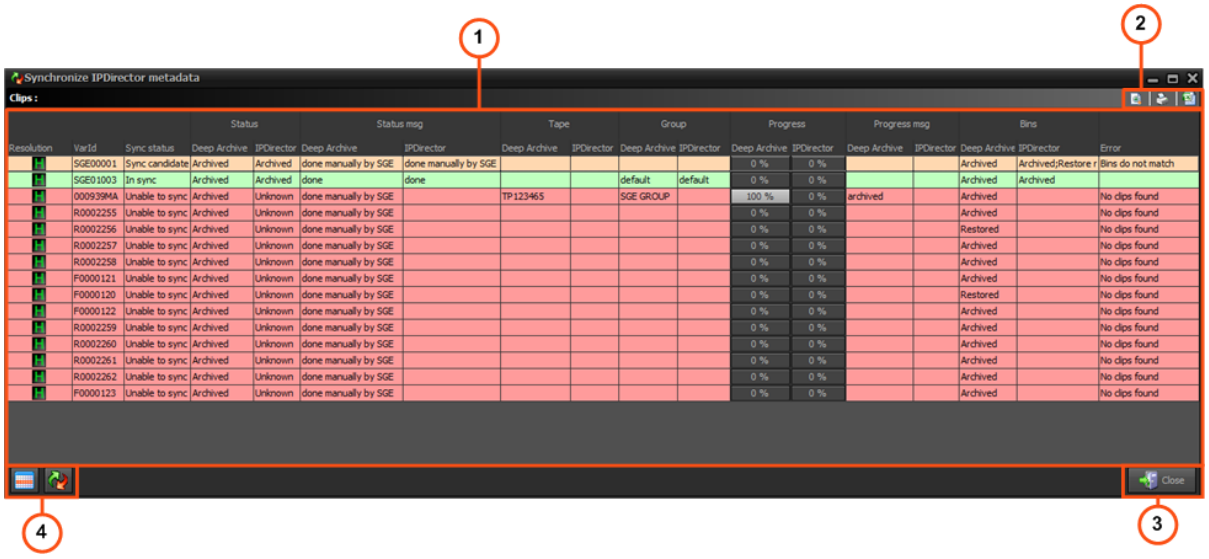
General Description

The Synchronize IPDirector Metadata window appears once Deep Archive Sync has completed comparing.

It displays the archive metadata of the clips as found in the IP2Archive database and in the IPDirector database. Each clip is highlighted with a particular color indicating its synchronization status. It allows you to start the synchronization process for one or more clips.

Illustration

The Synchronize IPDirector Metadata window contains the areas highlighted on the screenshot below:


1
2
Synchronize IPDirector metadata
Clips :
Status
Status msg
Tape
Group
Progress
Progress msg
Bins
Resolution
VarId
Sync status
Deep Archive
IPDirector
Error
SGE00001 Sync candidate Archived Archived done manually by SGE done manually by SGE Bins do not match
SGE01003 In sync Archived Archived done done default default Archived Archived
000939MA Unable to sync Archived Unknown done manually by SGE TP123465 SGE GROUP 100 % 0 % archived Archived No clips found
R0002255 Unable to sync Archived Unknown done manually by SGE Archived No clips found
R0002256 Unable to sync Archived Unknown done manually by SGE Restored No clips found
R0002257 Unable to sync Archived Unknown done manually by SGE Archived No clips found
R0002258 Unable to sync Archived Unknown done manually by SGE Archived No clips found
F0000121 Unable to sync Archived Unknown done manually by SGE Archived No clips found
F0000120 Unable to sync Archived Unknown done manually by SGE Restored No clips found
F0000122 Unable to sync Archived Unknown done manually by SGE Archived No clips found
R0002259 Unable to sync Archived Unknown done manually by SGE Archived No clips found
R0002260 Unable to sync Archived Unknown done manually by SGE Archived No clips found
R0002261 Unable to sync Archived Unknown done manually by SGE Archived No clips found
R0002262 Unable to sync Archived Unknown done manually by SGE Archived No clips found
F0000123 Unable to sync Archived Unknown done manually by SGE Archived No clips found
Close
4
3

Area Description

The table below describes the various parts of the Synchronize IPDirector Metadata window:

Part	Name	Description
1.	Comparison grid	The Comparison grid displays the clip archive metadata originating from the IP2Archive database next to the clip archive metadata originating from the IPDirector database. Colors indicate the synchronization status of each clip. See section "Information About the Comparison" on page "22".
2.	Preview, Print and Export buttons	The clips in the Comparison grid can be printed and exported to Excel. The **Print Preview** button is used to open a print preview. The **Print** button is used to print the content of the grid. The **Export to Excel** button is used to export the content of the grid to Excel.
3.	Close button	The **Close** button is used to exit the window.
4.	Synchronize buttons	The **Select All Clips That Can Be Synchronized** button allows you to select all clips in the grid that can be synchronized. The **Synchronize Selected Clips** button allows you to start the synchronization of the data of the selected clips in the grid.

Information About the Comparison

Clip Data Compared with the IPDirector Database

The Comparison grid in the Synchronize IPDirector Metadata window compares the following clip data:

Clip Data	Description
Status Deep Archive	The archive status of the clip in the IP2Archive database.
Status IPDirector	The archive status of the clip in the IPDirector database.
Status Message Deep Archive	The status message linked to the clip in the IP2Archive database.
Status Message IPDirector	The status message linked to the clip in the IPDirector database.
Tape Deep Archive	The ID of the LTO tape in the IP2Archive database.
Tape IPDirector	The ID of the LTO tape in the IPDirector database.
Group Deep Archive	The name of the tape group the LTO tape belongs to in the IP2Archive database.
Group IPDirector	The name of the tape group the LTO tape belongs to in the IPDirector database.
Deep Archive Progress	The progress bar indicating the progress of the archive, purge, restore or remove online copy process as stored in the IP2Archive database.
Progress IPDirector	The progress bar indicating the progress of the archive, purge, restore or remove online copy process as stored in the IPDirector database.
Deep Archive Progress Message	The textual description of the progress as stored in the IP2Archive database.
IPDirector Progress Message	The textual description of the progress as stored in the IPDirector database.
Bins Deep Archive	The name of the IPDirector archive or restore bin in which the clip is located as stored in the IP2Archive database.
Bins IPDirector	The name of the IPDirector archive or restore bin in which the clip is located as stored in the IPDirector database.
Error	An error message that indicates what the difference is between the data in the IP2Archive database and the IPDirector database.

Synchronization Status

The clips can have one of the following synchronization statuses. Each status corresponds to a particular highlight color.

Synchronization Status	Description	Color
In Sync	The archive metadata of the clip in the IPDirector database has been synchronized.	green
Sync Candidate	The archive metadata of the clip in the IPDirector database has to be synchronized with the archive metadata in the IP2Archive database.	orange
Unable to Sync	The archive metadata of the clip cannot be synchronized.	red

Error Messages

The following error messages can appear in the Comparison grid:

Error Message	Description
'Archive states do not match'	The archive status in the IPDirector database does not match the archive status in the IP2Archive database.
'Archive status messages do not match'	The archive status messages in the IPDirector database do not match the archive status messages in the IP2Archive database.
'Bins do not match'	The archive or restore bin in the IPDirector database does not match the bin in the IP2Archive database.
'Clips that are in progress or in error cannot be synchronized'	The archive metadata cannot be synchronized because the clip is being processed by IP2Archive or because the clip is in error.
'Failed to add clip <VARID> to bin <BIN>: <SOAP_ ERROR_MESSAGE>'	A clip could not be moved to a particular archive or restore bin in IPDirector because of a problem with the IPDirector API.
'Failed to find clip with VarId <VARID>'	The IPDirector API call failed.
'Failed to find clips'	An unexpected error occurred when searching for clips with a particular VarID.
'Failed to remove clip <VARID> from bin <BIN>: <SOAP_ERROR_ MESSAGE>'	A clip could not be removed to a particular archive or restore bin in IPDirector because of a problem with the IPDirector API.
'Failed to update metadata for <VARID>: <SOAP_ ERROR_MESSAGE>'	The archive metadata of a particular clip could not be updated in the IPDirector database because of a problem with the IPDirector API.
'Group names do not match'	The LTO tape group name in the IPDirector database does not match the name in the IP2Archive database.
'LTO tape ids do not match'	The LTO tape ID in the IPDirector database does not match the tape ID in the IP2Archive database.

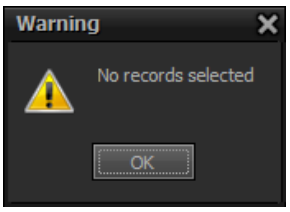
Error Message	Description
'No clip found'	No corresponding clip was found in the IPDirector database with the same VarID.
'No clip found for clip with VarId <VARID>'	The clip was not found in the IPDirector database.
‘No metadata found’	No IP2Archive metadata profile was assigned to the clip in IPDirector.
'Progress messages do not match'	The progress messsage in the IPDirector database does not match the message in the IP2Archive database.
'Progresses do not match'	The progress in the IPDirector database does not match the progress in the IP2Archive database.

How to Start the Synchronization with IPDirector

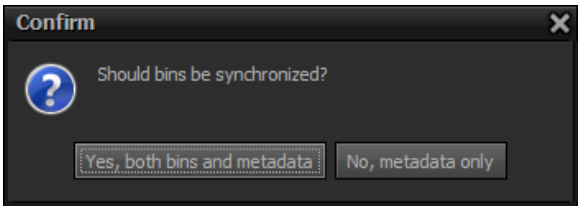
To synchronize the clip archive metadata in the IPDirector database, proceed as follows:

1. Do one of the following:
   - Select the clip whose archive metadata you want to synchronize.
   - Click to select all the clips whose archive metadata can be synchronized.
2. Click to start the synchronization process.

   If you click before selecting any clips, a warning appears.

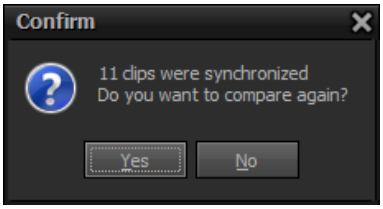
   Depending on the settings,a dialog box might appear asking if you also want to synchronize the content of the archive and restore bins in IPDirector. See section "General Tab" on page "58". Continue to step 3.

   If you have selected a clip that is already in sync with the IP2Archive database, a warning appears: 'Clip with VarId <VarID> is already in sync with IP2Archive'.
3. Click the **Yes, Both Bins And Metadata** button if you want Deep Archive Sync to both synchronize the clip archive metadata and the content of the archive and restore bins in IPDirector. Click the **No, Metadata Only** button if you only want the clip archive metadata to be synchronized.

   The synchronization is performed.

   Once synchronization has been completed, a message appears displaying the number of clips that have been synchronized and asking you if you want to compare again.

5.3. Synchronizing Clip Archive Metadata with DIVA

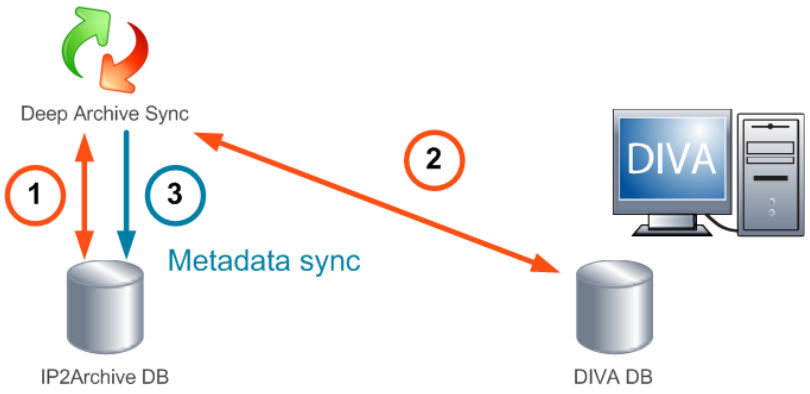
5.3.1. Workflow

To synchronize the clip archive metadata in the IP2Archive database with the clip archive metadata in the DIVA database, proceed as follows:

1. Open the Deep Archive tab of Deep Archive Sync and search for specific clips in the IP2Archive database using the available search criteria.
2. In the Deep Archive tab, request requests a comparison between the archive metadata of the clips that were found in the IP2Archive database with the same clips in the DIVA database. Deep Archive Sync performs a comparison through the DIVA API.

   The Synchronize with DIVA window displays the result of the comparison.
3. In the Synchronize with DIVA window, select the clips whose archive metadata can be synchronized and start the synchronization process.

   The archive metadata in the IP2Archive database is synchronized with the archive metadata in the DIVA database.



5.3.2. Searching for Clips in the IP2Archive Database

See section "Searching for Clips in the IP2Archive Database" on page "18".

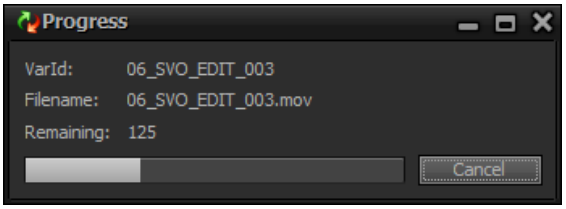
5.3.3. Comparing and Synchronizing Clip Archive Metadata

How to Request a Comparison with DIVA

Once you have searched for the desired clips in the IP2Archive database, you can request to compare their archive metadata with the archive metadata of the clips in the DIVA database.

To start the comparison, click the **Compare with DIVA** button .

A dialog box appears displaying the VarID of the clip and the name of the attached video file that is being processed. It also displays the remaining items and the progress of the process.



Synchronize with DIVA Window

General Description

The Synchronize with DIVA window appears once Deep Archive Sync has completed comparing.

It displays the archive metadata of the clips as found in the IP2Archive database and in the DIVA database. The clips are highlighted in a particular color indicating their synchronization status. It allows you to start the synchronization process for one or more clips.

Illustration

The Synchronize with DIVA window contains the areas highlighted on the screenshot below:

Area Description

The table below describes the various parts of the Synchronize with DIVA window:

Part	Name	Description
1.	Comparison grid	The Comparison grid displays the clip archive metadata originating from the IP2Archive database next to the clip archive metadata originating from the DIVA database. Colors indicate the synchronization status of each clip. See section "Information About the Comparison" on page "30".
2.	Preview, Print and Export buttons	The clips in the Comparison grid can be printed and exported to Excel. The **Print Preview** button is used to open a print preview. The **Print** button is used to print the content of the grid. The **Export to Excel** button is used to export the content of the grid to Excel.

Part	Name	Description
3.	Close button	The **Close** button is used to exit the window.
4.	Synchronize buttons	The **Select All Clips That Can Be Synchronized** button allows you to select all clips in the grid that can be synchronized. The **Synchronize Selected Clips** button allows you to start the synchronization of the data of the selected clips in the grid.

Information About the Comparison

Clip Data Compared with the DIVA Database

The Comparison grid in the Compare with DIVA window displays the following data:

Clip Data	Description
Compared	A check box indicating if the archive metadata of the clip in the IP2Archive database has been compared with the DIVA database.
In Sync	A check box indicating if the archive metadata of the clip in the IP2Archive database is in sync with the DIVA database.
VarID	A 32-character ID with variable length and format. It is automatically assigned by IPDirector to new clips. It is mainly used to ensure redundancy on the system.
Category	The category of the DIVArchive object.
Status Deep Archive	The archive status of the clip in the IP2Archive database.
Status DIVA	The archive status of the clip in the DIVA database.
Tape Deep Archive	The ID of the LTO tape in the IP2Archive database.
Tape DIVA	The ID of the LTO tape in the DIVA database.
Progress Deep Archive	The progress bar indicating the progress of the archive, purge, restore or remove online copy process as stored in the IP2Archive database.
Progress DIVA	The progress bar indicating the progress of the archive, purge, restore or remove online copy process in the DIVA database.

Clip Data	Description
Progress Message Deep Archive	The textual description of the progress in the IP2Archive database.
Progress Message DIVA	The textual description of the progress in the DIVA database.
Error	An error message that indicates what the difference is between the data in the IP2Archive and DIVA database.

Synchronization Status

The clips can have one of the following synchronization statuses. Each status corresponds to a particular highlight color.

Synchronization Status	Description	Color
In Sync	The archive metadata of the clip in the IP2Archive database has been synchronized.	green
Sync Candidate	The archive metadata of the clip in the IP2Archive database has to be synchronized with the DIVA database.	orange
Unable to Sync	The archive metadata of the clip cannot be synchronized.	red

Error Messages

The following error messages can appear in the Comparison grid:

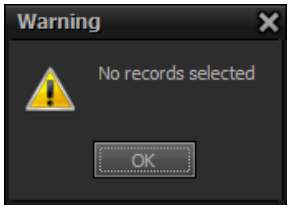
Message	Description
'Archive states do not match'	The archive status in the IP2Archive database does not match the archive status in the DIVA database.
'Clips that are in progress or in error cannot be synchronized'	The archive metadata cannot be synchronized because the clip is being processed by IP2Archive or because the clip is in error.
'DIVA category not found'	The category of the DIVA object could not be found in the DIVA database.
'Failed to find DIVA object: [DIVA error]'	The DIVA object could not be found in the DIVA database because of a known DIVA error.
'Failed to find DIVA object: Unknown error'	The DIVA object could not be found in the DIVA database because of an unknown error.
'Failed to synchronize clip <VARID>: <EXCEPTION_MESSAGE>'	The archive metadata of the clip could not be synchronized in the IP2Archive database.
'LTO tape ids do not match'	The LTO tape ID in the IP2Archive database does not match the tape ID in the DIVA database.

Message	Description
'Progresses do not match'	The progress in the IP2Archive database does not match the progress in the DIVA database.
'Progress messages do not match'	The progress messsage in the IP2Archive database does not match the message in the DIVA database.

How to Start the Synchronization with DIVA

To synchronize the clip archive metadata in the IP2Archive database with the DIVA database, proceed as follows:

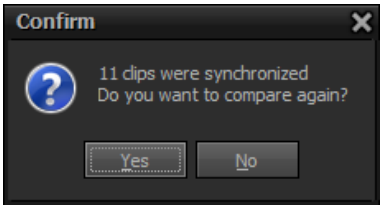
1. Do one of the following:
   - Select the clip whose archive metadata you want to synchronize.
   - Click to select all the clips whose archive metadata can be synchronized.
2. Click to start the synchronization process.
   - If you click before selecting any clips, a warning appears.

   - If you have a selected a clip that is already in sync with the DIVA database, a warning appears: 'Clip with VarId <VarID> is already in sync with DIVA'.

   The synchronization is performed.

   Once synchronization has been completed, a message appears displaying the number of clips that have been synchronized and asking you if you want to compare again.

5.4. Synchronizing the Low-Resolution File

5.4.1. Workflow

To check if the low-resolution video file of clips exists in the IPDirector database and is online, proceed as follows:

1. Open the Deep Archive tab of Deep Archive Sync and search for specific clips in the IP2Archive database using the available search criteria.
2. In the Deep Archive tab, request a check of the low-resolution video file.

   Deep Archive Sync checks the IPDirector database through the IPDirector API. The Synchronize IPDirector Lores window displays the results of the check.
3. Perform the actions as suggested by Deep Archive Sync to get the low-resolution video file back online.

5.4.2. Searching for Clips in the IP2Archive Database

See section "Searching for Clips in the IP2Archive Database" on page "18".

5.4.3. Checking and Synchronizing the Low-Resolution Video File

How to Start Checking the Status of the Low-Resolution File

Once you have searched for the desired clips in the IP2Archive database, you can request Deep Archive Sync to check in the IPDirector database if a low-resolution file exists for the clips in questions and if the file is online or not.

Click the **Check if Lores Exists in IPDirector** button to start the check.

A dialog box appears displaying the ID and filename of the clips. It also displays the remaining clips to be checked and the progress of the process.

Once the check has been completed, the Synchronize IPDirector Lores window appears.

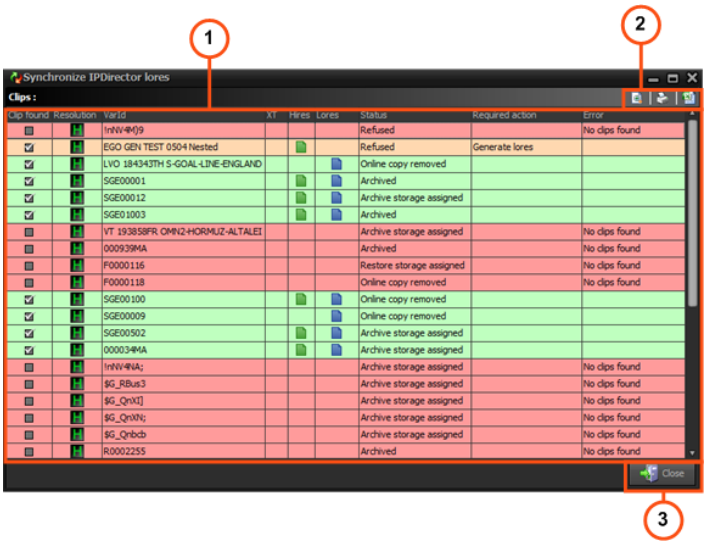
Synchronize IPDirector Lores Window

General Description

The Synchronize IPDirector Lores window displays if the low-resolution video file of a particular clip exists in the IPDirector database and if it is available online or not. If the low-resolution video file does not exist or is not online, it suggests the actions to perform to get the low-resolution video file back online again.

Illustration

The Synchronize IPDirector Lores window contains the areas highlighted on the screenshot below:



Area Description

The table below describes the various parts of the Synchronize IPDirector Lores window:

Part	Name	Description
1.	Lores Status grid	The Lores Status Grid displays the online availability of the low-resolution video file. See section "Information About the Status of the Low-Resolution File" on page "37".

Part	Name	Description
2.	Preview, Print and Export Buttons	The clips in the Lores Status grid can be printed and exported to Excel. The **Print Preview** button is used to open a print preview. The **Print** button is used to print the content of the grid. The **Export to Excel** button is used to export the content of the grid to Excel.
3.	Close Button	The **Close** button is used to exit the window.

Information About the Status of the Low-Resolution File

Lores Status Grid

The following information is displayed in the Lores Status grid:

Column	Description
Clip Found	A check box indicating if the clip was found in the IPDirector database.
VarID	The VarID of the clip.
XT	Indicates if the clip is available on the XT server. • The icon appears when the clip is available on the XT server. • The column is empty when the clip is unavailable.
Hires	Indicates if the high-resolution video file is available online. • The icon appears when the high-resolution video file is online. • The column is empty when the high-resolution video file is offline.
Lores	Indicates if the low-resolution video file is available online. • The icon appears when the low-resolution video file is online. • The column is empty when the low-resolution video file is offline.
Status	The archive status of the clip.
Required Action	One or more actions that have to be performed to get the low-resolution video file online again.
Error	Error message.

Suggested Actions to Get Back Online the Low-Resolution File

Deep Archive Sync can suggest the following required actions:

Suggested Action	Context
Generate lores	The high-resolution video file is available online. The low-resolution video file can be generated from the high-resolution video file.
Restore hires, then generate lores	The high-resolution video file is not available online, but has been archived to LTO. It has to be restored first before you can generate the low-resolution video file.
Synchronize hires, then restore hires, then generate lores	The high-resolution video file has been removed in IPDirector but is still online in the IP2Archive database. You first have to synchronize the IPDirector database with the IP2Archive database and then restore the high-resolution video file before you can generate the low-resolution video file.
Unable to restore	The high- and low-resolution video file are not available online, no clip is available on the XT server and the clip was not archived on LTO tape.
Wait for lores to be removed, then restore lores	The low-resolution video file has been requested to be or is being removed from the nearline storage. You have to wait until the low-resolution video file has been completely removed before you can restore the file from LTO tape.
Wait for hires to be removed, then restore hires, then generate lores	The high-resolution video file has been requested to be or is being removed from the nearline storage. You have to wait until the high-resolution video file has been completely removed before you can restore it back to the nearline and before you can generate the low-resolution video file.
Wait for hires to be restored, then generate lores	The high-resolution video file is being restored to the nearline. You have to wait until it has been completely restored before you can generate the low-resolution video file.
Restore lores	The low-resolution video file has been archived to LTO and is not available online. You have to restore it back to the nearline.

Error Message

The following error messages can appear in the Error column:

Column	Description
'No clip found'	The corresponding clip could not be found in the IPDirector database.
'Failed to find clips: <SOAP_ MESSAGE>'	The corresponding clips could not be found in the IPDirector database.
'Unable to restore lores'	The low-resolution video file could not be restored.
'Could not move clip <VARID> to 'generate lores' bin: <SOAP_ ERROR_MESSAGE>'	The corresponding clip could not be moved to the Generate Lores bin in IPDirector.
'Could not request restore for <VARID> in state <STATUS>'	A restore could not be requested for clips whose high-resolution video file has not been removed yet from the nearline storage.

5.5. Removing Clip Archive Metadata from IPDirector

5.5.1. Workflow

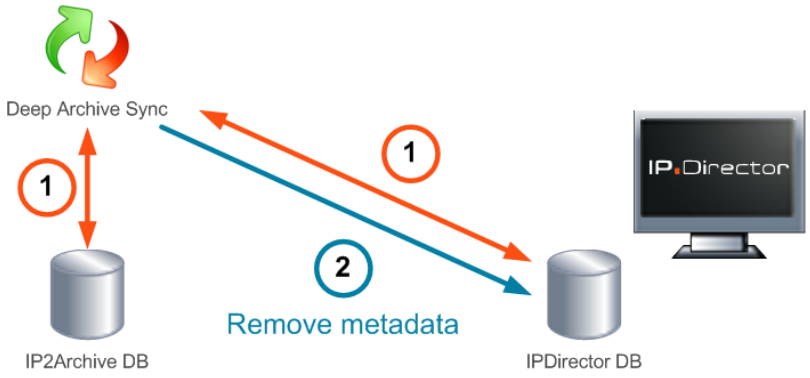
To remove the archive metadata in the IPDirector database of clips that are not known in the IP2Archive database, proceed as follows:

1. Open the IPDirector tab of Deep Archive Sync and search for the clips with archive metadata that are unknown in the IP2Archive database.

   The clips are displayed in the Results pane of the IPDirector tab.

2. In the IPDirector tab, request to remove the archive metadata of these clips from the IPDirector database.

   Deep Archive Sync removes the archive metadata from the IPDirector database through the IPDirector API.



5.5.2. Searching for Clips

To search for clips in the IPDirector database with clip archive metadata that does not exist in the IP2Archive database, click the **Search** button in the IPDirector tab.

5.5.3. Removing Clip Archive Metadata

To remove the archive metadata of clips, click the **Synchronize** button in the IPDirector tab. If nothing is selected, the **Synchronize** button remains unavailable.

6. Managing Grids

6.1. Introduction

In Deep Archive Sync most of the data is displayed in grids. Each grid consists of a number of columns containing specific information.

Deep Archive Sync provides you a number of features to customize each grid.

You can:

- adjust the width of each column
- reorder columns
- add and remove columns
- hide and unhide columns
- sort and filter data
- perform basic calculations on data.

You can also print the data of each grid or export it to Excel for reporting purposes.

6.2. Manipulating Columns

6.2.1. Adjusting the Width of Columns

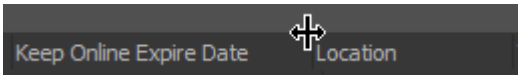
The width of each grid column can be manually or automatically adjusted.

How to Manually Adjust the Column Width

To manually adjust the width of a particular column, drag the right or left border of the column header until the column has the desired width.

To manually change the width of a column to fit its contents, double-click the boundary on the right side of the column header.

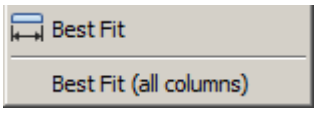
If you hold your cursor over a column header border, it will change into a double-headed arrow.



How to Automatically Adjust the Column Width

To automatically adjust the width of a column to fit its contents, right-click the column header, and then select the **Best Fit** option from the context menu.

To automatically adjust the width of all columns to fit their contents, right-click the column header, and then select the **Best Fit (all columns)** option from the context menu.



6.2.2. Reordering Columns

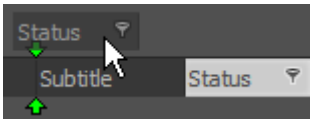
If you want the information in a grid to be displayed in a different order, you can change the position of the columns. There are two ways to reorder columns.

How to Reorder a Column Using a Drag-And-Drop Action

To reorder a column by directly dragging its header, proceed as follows:

1. Click the header of the column you want to move and hold down your left mouse button.
2. Drag the column header to the desired position in the grid.

   Two arrows will indicate where it is possible to insert the column.

   A black prohibition sign will indicate where the column cannot be inserted.

3. Release the left mouse button to insert the column.

How to Reorder a Column Using the Show/Hide/Move Button

You can also reorder the columns of a grid by using the **Show/Hide/Move** button:

1. Click on the left side of the first column header.

   A drop-down list containing the headers of the grid columns appears. The column headers are listed in the order in which the columns are displayed in the grid. The first header in the list is the leftmost field in the grid. The columns that are visible in the grid are selected.

   The headers in the screenshot below can differ from the headers available in your application.

2. Select a header and drag it to the desired position in the list. Green arrows will appear indicating where you can insert the grid.

In the grid, the column will be moved to the new position.

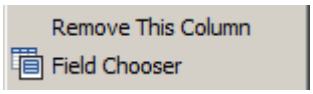
6.2.3. Adding and Removing Columns

If you want more or less information to be displayed in a particular grid, you can simply add or remove one or more columns.

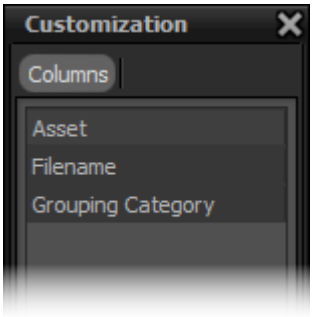
How to Add a Column

To add a column to a grid, proceed as follows:

1. Right-click the header of a column, and then select the option **Field Chooser** from the context menu.

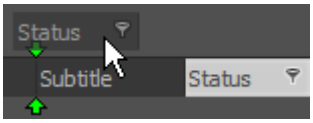
   

   A dialog box appears with a list of predefined columns you can add to the grid. Note that the column headers shown in the screenshot below can differ from the ones displayed in your application.

2. From the list, select the header of the column you want to add to the grid.
3. Drag the column header to the desired position in the grid.

   Two green arrows will appear indicating where you can insert the column.

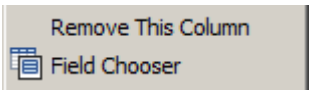
   

   A black prohibition sign or cross will appear if you try to insert the column in a location where it cannot be inserted.

4. Release the left mouse button to insert the column.

How to Remove a Column

To remove a column from a grid, right-click its header and then select the option **Remove This Column** from the context menu.



The column will disappear from the grid and its header will be added to the dialog box containing the columns that can be added to the grid.

The removed column can be added again to the grid.

6.2.4. Hiding and Unhiding Columns

You can temporarily hide columns from a grid without having to remove them. Afterwards, you can easily make them visible again.

How to Hide a Column

To hide a particular column from a grid, proceed as follows:

1. Click the **Show/Hide/Move** button in the top left corner of the grid.

   A drop-down list will appear with the available columns.

2. Deselect the check box next to the header of the column you want to hide from the grid.

How to Unhide a Column

To make a hidden column visible again, proceed as follows:

1. Click the **Show/Hide/Move** button in the top left corner of the grid.

   A drop-down list will appear with the available columns.

2. Select the check box next to the header of the column you want to make visible again.

6.3. Copying Data

To copy the data of a particular grid row to the Clipboard, proceed as follows:

1. Select the appropriate row in the grid.
2. Press CTRL +C.

6.4. Sorting Data

Each grid can be sorted according to the values in one of the columns. You can sort text (from A-Z or from Z-A), numbers (from low to high or from high to low).

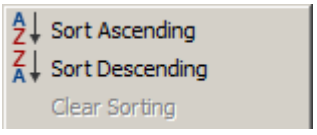
How to Sort Data by Clicking a Column Header

To sort the data in a particular column, click the column header once to sort the data in ascending order. Click again to sort the data in descending order. An arrow next to the column header indicates the sorting method.

VarId ▲	sorted in ascending order
VarId ▼	sorted in descending order

How to Sort Data by Using the Context Menu

You can also sort the data in a particular column by right-clicking the column header and selecting the desired sorting method from the context menu.



To clear the sorting in a particular column, right-click the column header and select the option **Clear Sorting** from the context menu.

6.5. Filtering Data

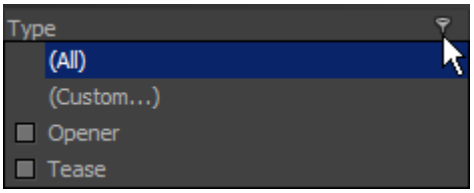
You can filter the data in a grid by using two types of filters: by one or more values from a particular column or by simple or complex criteria.

6.5.1. Filtering by Values From a Column

To filter the data in a particular grid by one or more values from a particular column, proceed as follows:

1. Hold your cursor over the header of the column by whose values you want to filter the grid, and then click the filter button.

   A drop-down list opens containing all the column values.

2. Select the desired values.

   Only the records that contain one of the selected values are displayed in the grid. At the bottom of the grid a filter bar appears displaying the applied filter.

3. In the filter bar, do one of the following:
   - Clear the check box next to the filter to undo it. Select the check box to apply the filter again.
   - Click to undo the filter and close the filter bar.
   - Click to open a drop-down list containing previously applied filters.
   - Click **Customize** to create a complex filter.

6.5.2. Filtering by Criteria

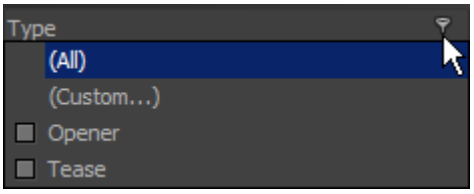
Filters by criteria can be simple or complex:

- **Simple filters** consist of one or two criteria and one Boolean operator (AND or OR).
- **Complex filters** consist of more than two criteria and more than one Boolean operator (AND, OR, NOT AND and NOT OR).

How to Create a Simple Filter

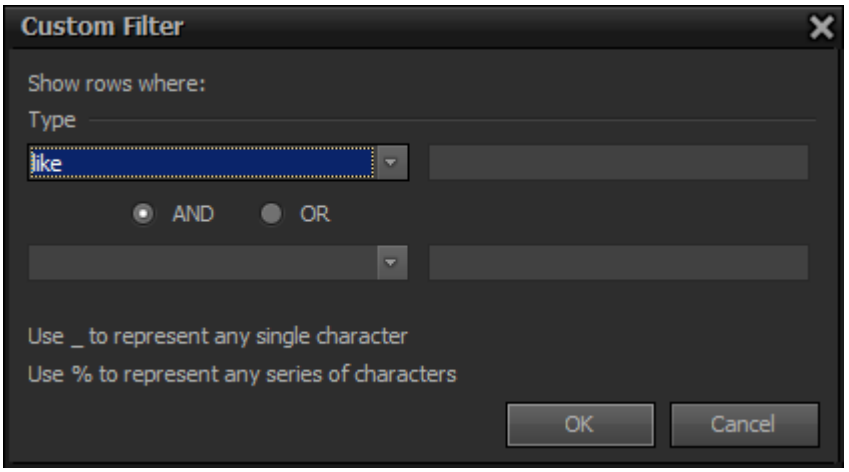
To create a simple filter, proceed as follows:

1. Hold your cursor over the header of the desired column, and then click the filter button appearing in the right corner.



2. From the drop-down list, select the option **(Custom...)**.

   The Custom Filter dialog box appears. Here you can enter the criterion or the two criteria you want to filter the values of the selected column by.



3. Select the desired comparison operator from the first drop-down list.

   A comparison operator is used in comparison criteria to compare two values. Operators include: 'equals', 'does not equal', 'is less than', 'is less than or equal to', 'is greater than', 'is greater than or equal to', 'like', 'not like', 'is blank' and 'is not blank'.

   For example, if you want to filter the values of a column by text that includes a certain word, character or sign, you have to select the comparison operator 'like'.

4. Enter text in the field next to the first drop-down list.

   For example, if you want to filter by text that includes the letter 'S', type %S%.

   The % wildcard can substitute for zero or more characters. The _ character can substitute for exactly one character.

5. If you want to add a second filter criterion, select the desired Boolean operator. Select:
   - **AND**, if both criteria have to be true;
   - **OR**, if at least one of the criteria or both have to be true.
6. Select the desired comparison operator from the second drop-down list, and then enter text in the field at the right.
7. Click **OK** to apply the filter.

   Only the values matching the entered criterion or criteria will be displayed.

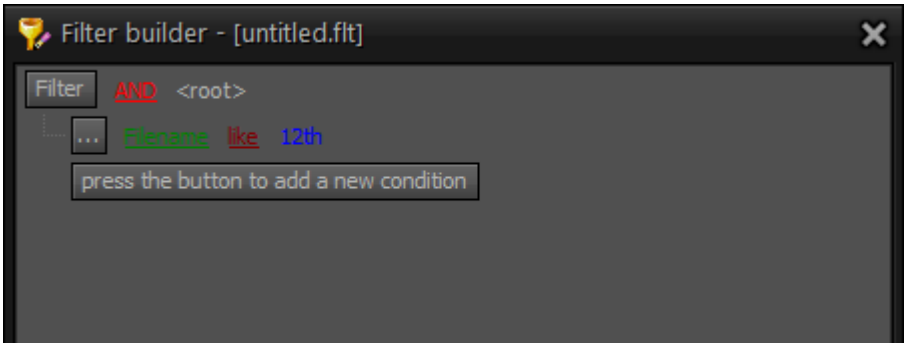
How to Create a Complex Filter

To create a complex filter, proceed as follows:

1. Apply a simple filter to a grid or filter a grid by selecting one or more values from a list of values. See above.

   At the bottom of the grid a filter bar appears.
2. In the filter bar, click the **Customize** button.

   A dialog box appears that allows you to create complex filters. The criteria of the active filter are displayed in a tree structure. Here you can add extra criteria and change the existing criteria.



3. Do one of the following:

- To add a new criterion, do one of the following:
  - click the **Press the Button to Add a New Condition** button;
  - click the **Filter** button and select **Add Condition**;
  - click ... next to a criterion and select **Add Condition**.
- To change a criterion, do one of the following:
  - click a column header (green and underlined text) and select another value from the list;
  - click a comparison operator (dark red and underlined text) and select another value from the list: ‘equals’, ‘does not equal’, ‘is less than’, ‘is less than or equal to’, ‘is greater than’, ‘is greater than or equal to’, ‘like’, ‘not like’, ‘is blank’, ‘is not blank’, ‘between’, ‘not between’, ‘in’, ‘not in’;

- click the dark blue text on the right of the comparison operator and enter another value.

- To delete a criterion, click the button to the left of the criterion and select the option **Remove Row**.
- To add a group of criteria, do one of the following:
  - click next to a random criterion and select **Add Group**;
  - click the **Filter** button and select **Add Group**.
- To delete all criteria, click the **Filter** button and select the option **Clear All**.

4. Do one of the following:
   - To open an existing complex filter, click **Open**;
   - To save the current filter, click **Save As**;
   - To confirm the changes and close the dialog box, click **OK**;
   - To undo the changes, click **Cancel**.
   - To apply the changes, click **Apply**.

   At the bottom of the grid a bar appears which displays the components of the complex filter. Note that if you have already created a custom filter in the past, you can reapply it by clicking the current filter or the downward pointing arrow. A drop-down list containing previous filters appears.

6.6. Performing Basic Calculations on Data

6.6.1. Footers and Basic Calculations

You can perform basic calculations on the data in a grid by adding footers.

Types of Footers

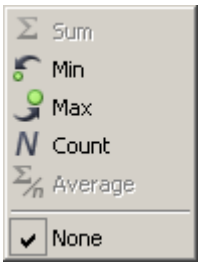
Two types of footers can be distinguished:

- **Grid footer:** Footer added at the bottom of a grid allowing you to perform calculations on all values in a particular column.
- **Group footer:** Footer added at the bottom of a group allowing you to perform calculations on the values of a particular column in that group.

The result of a calculation performed on the data of a particular column is displayed in a **footer cell** below the column in the grid or group footer.

Basic Calculations

Right-clicking a footer cell in a grid or group footer will open the **footer context menu**. This menu will allow you to select or change the type of calculation that should be performed on the data of a particular column.



Depending on the type of data contained in each column, you will be able to perform one or more of the following calculations:

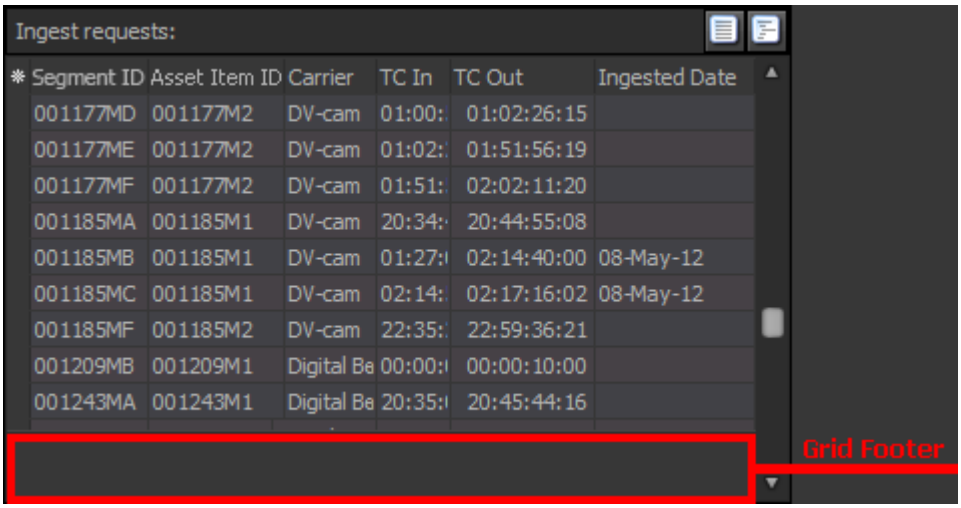
- **Sum**: Adds up all numbers in a column.
- **Min**: Defines the lowest value in a column.
- **Max**: Defines the highest value in a column.
- **Count**: Counts the elements in a column.
- **Average**: Calculates the average value of all numbers in a column.

6.6.2. Performing Basic Calculations on Non-Grouped Data

To perform basic calculations on all the data of one or more column, proceed as follows:

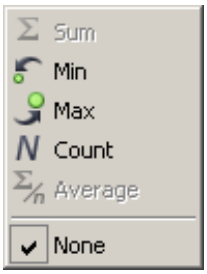
1. Right-click the desired column header.
2. From the context menu, select the **Footer** option.

The grid footer automatically appears at the bottom of the grid.



3. In the grid footer, right-click the footer cell below the column whose data you want to perform calculations on.

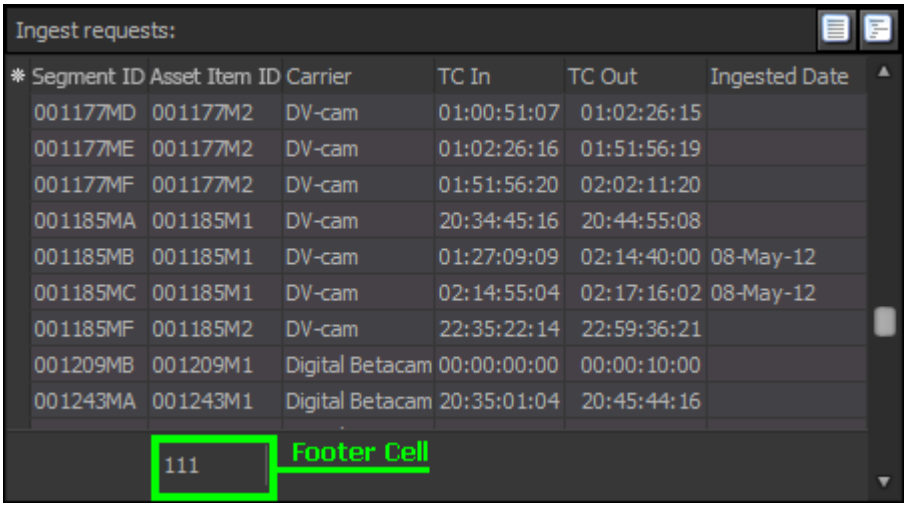
   A context menu with basic calculations appears.



Note
Depending of the type of data in a column (dates, alphanumeric data), all or only some of the calculations will be available.

4. Select the desired calculation.

In the footer cell the result of the calculation appears.

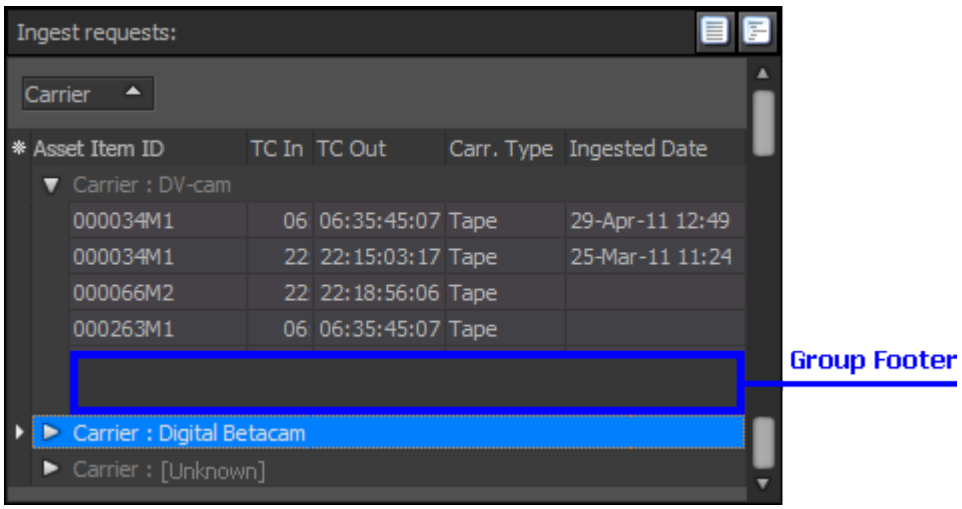


6.6.3. Performing Basic Calculations on Grouped Data

To perform basic calculations on data in a group, proceed as follows:

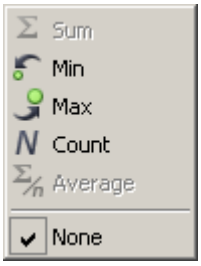
1. Right-click the header of any column in the grid.
2. From the context menu, select the **Group Footers** option. This option only becomes available when the data in the grid has been grouped.

A group footer is added to each group in the grid.



3. In the group footer, right-click the footer cell below the column whose data you want to perform calculations on.

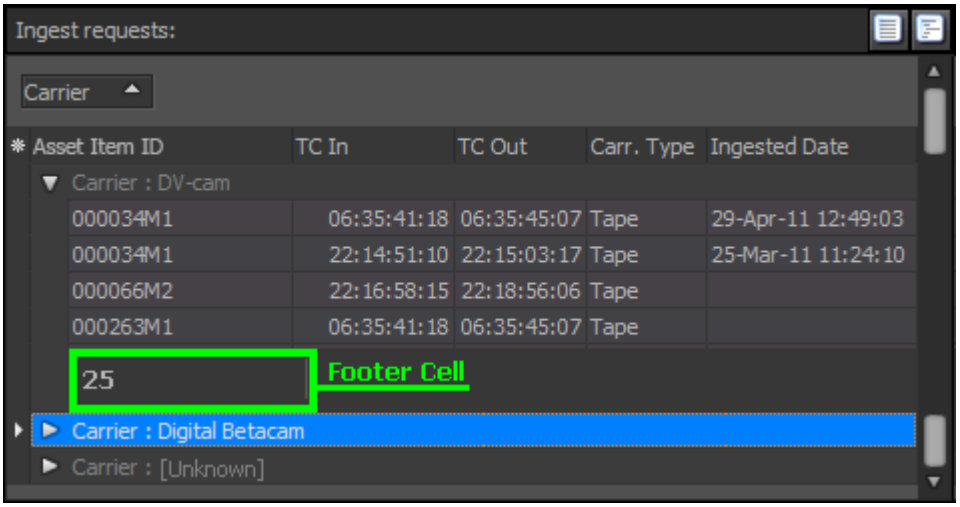
   A context menu with basic calculations appears.



> **Note**
> Depending of the type of data in a column (dates, alphanumeric data), all or only some of the calculations will be available.

4. Select the desired calculation.

In the footer cell the result of the calculation appears.

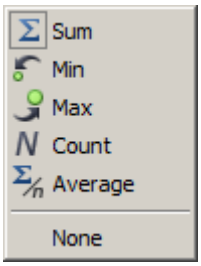


6.6.4. Removing Footers

You can remove the grid and group footers and also clear the content of a cell footer. Do one of the following:

- To remove the grid footer or all group footers, right-click any column header and in the context menu deselect the option **Footers** or **Group Footers**.

- To clear the contents of a cell footer, right-click it and from the footer context menu select the option **None**.



6.7. Printing and Exporting Data

The data in a grid can be printed and exported to Excel for reporting purposes.

How to Print Data

To print the data of a particular grid, proceed as follows:

1. Click the **Print** button above the grid whose data you want to print.

   A Print dialog box appears.

2. Click **Print** to print the grid data.

How to Export Data to Excel

To export the data of a particular grid to Excel, proceed as follows:

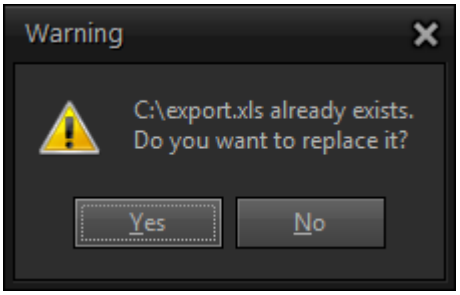
1. Click the **Excel Export** button above the grid whose data you want to export to Excel.

   An Excel file is generated.

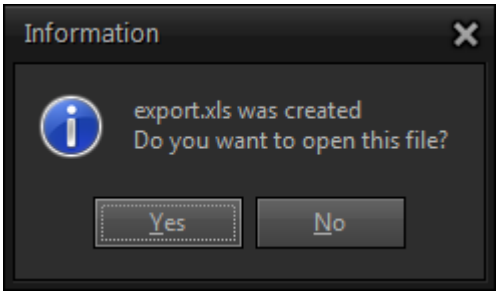
2. Browse for the folder where you want to save the Excel file.

3. Enter a name in the **File Name** field or use the default name, and then click **Save** to save the file.

   If the folder contains an Excel file with the same file name, a warning message will appear asking you if you want to replace the existing file. Click **Yes** to continue and **No** to cancel the operation.



   Once you have saved the file, a message box appears asking you if you want to open the newly generated Excel file. Click **Yes** to open the file and **No** to cancel the operation.

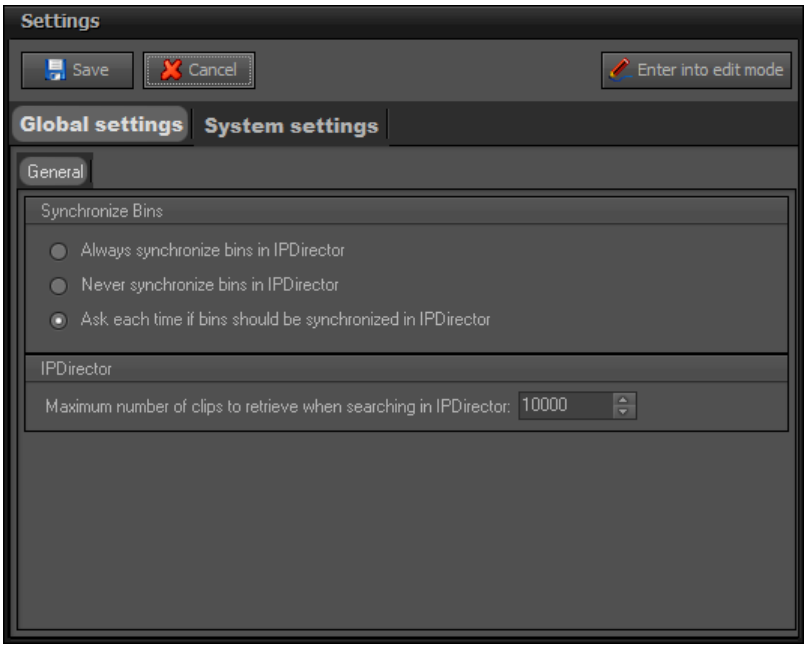


7. Configuring the Application

7.1. Settings Window

Opening the Settings Window

The Settings window allows you to configure your application. The first time the application is launched after it has been installed, the Settings window opens automatically.



The Settings window can also be accessed through the **Settings** menu.

Overview Setup Categories

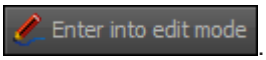
The settings can be divided into two setup categories. In the Settings window, a tab is provided for each setup category. The table below briefly describes each setup category:

Setup Category	Description
Global Settings	These settings can only be configured by the system administrator and by an eventual superuser.
System Settings	These settings configure the general functioning of the application. They can only be configured by the system administrator.

Edit Mode

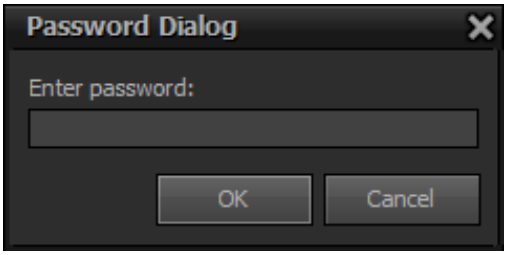
To be able to edit the Global and System settings, you first have to enter a password.

To put the Settings window into Edit Mode, proceed as follows:

1. Click the **Enter Into Edit Mode** button 

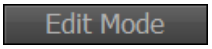
.

   A dialog box appears.



2. Enter the administrator password and then click **OK**.

   The Settings window enters into Edit Mode.



Note
Certain settings are read-only and cannot be configured. These can only be modified in the Configurator application. Other settings have to be configured locally.

Saving Settings

A **Save** button is provided which allows you to immediately save the changes you have made to the settings. With the **Cancel** button you can discard the changes you have made.

7.2. Global Settings

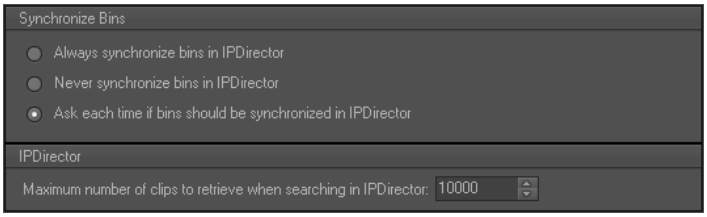
7.2.1. Overview Global Settings Subcategories

The Global settings are divided into the following subcategories:

- General

7.2.2. General Tab

In the General tab you can configure the synchronization of the content of the IPDirector archive and restore process bins by Deep Archive Sync.


Synchronize Bins
Always synchronize bins in IPDirector
Never synchronize bins in IPDirector
Ask each time if bins should be synchronized in IPDirector
IPDirector
Maximum number of clips to retrieve when searching in IPDirector:
10000

The following options are available:

- If you select the option **Always Synchronize Bins in IPDirector**, Deep Archive Sync will also automatically update the content of the bins in IPDirector when synchronizing the IPDirector clip metadata.
- If you select the option **Never Synchronize Bins**, Deep Archive Sync will not update the content of the bins in IPDirector.
- If you select the option **Ask Each Time if Bins Should Be Synchronized in IPDirector**, the user will have to confirm each time the synchronization of the content of the bins in IPDirector.

In the IPDirector group box you can specify a maximum number of clips to retrieve when searching in the IPDirector database. This to avoid that too much clips will be retrieved. By default, this is set to 10000.

7.3. System Settings

7.3.1. Overview System Settings Subcategories

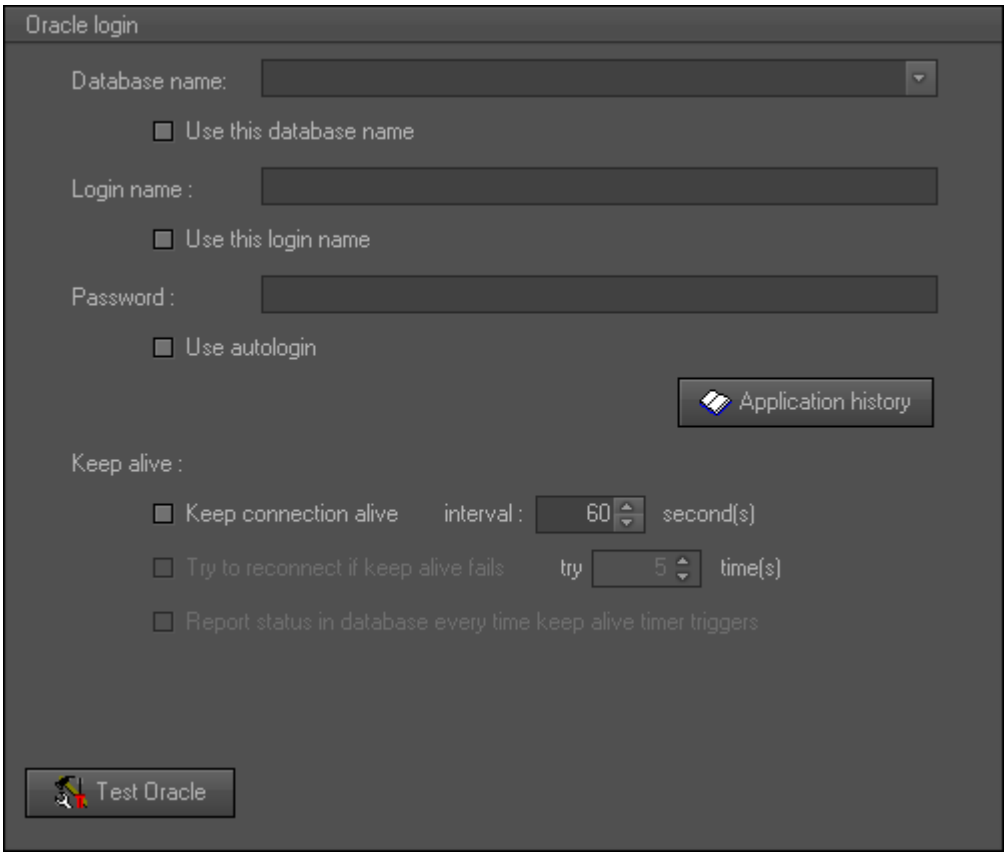
The System settings are divided into the following subcategories:

- Oracle Connection
- E-Mail Options
- IPDirector API
- IP2Archive Bins
- IP2Archive Metadata
- DIVA

For each subcategory a tab is provided.

7.3.2. Oracle Connection Tab

The Oracle Connection tab allows you to configure the connection with the Oracle database.



Entering the Database Name

In this field you have to enter the name of the database the application has to connect to.

If the **Use This Database Name** check box is selected, the name of the database will automatically appear in the Oracle login dialog box at start-up.

Note that the database name will be automatically entered and the **Use This Database Name** check box will be automatically selected when you log into the application for the very first time.

Entering the Login Name

In this field you have to enter a login name. If the **Use This Login Name** check box is selected, the login name will automatically appear in the Oracle login dialog box at start-up.

Note that the login name will be automatically entered and the **Use This Login Name** check box will be automatically selected when you log into the application for the very first time.

Entering a Password

In this field you have to enter a password. If the **Use Auto Login** check box is selected, the application automatically logs into the selected database at start-up. The Oracle login dialog box does not appear.

Note that the password will be automatically entered and the **Use Login** check box will be automatically selected when you log into the application for the very first time.

Checking Application History

By clicking the **Application History** button, you can open a chronological list of all software versions of the application. To get more details about each version (creation date, name of programmer, status, additional remarks), you have to click **+** next to the version number.

Activating Keep Alive

If the option **Keep Connection Alive** is selected, a message is sent to the database at regular time intervals to avoid idle connections from being closed by the firewall. These intervals can be set by you.

Note that this option will be automatically selected when you log into the application for the very first time.

If the option **Try to Reconnect if Keep Alive Fails** is selected, the application will try a number of times to reconnect with the database.

If the option **Report Status in Database Everytime Keep Alive Timer Triggers** is selected, the status of the connection is reported in the database each time the Keep Alive Timer sends a trigger to send a Keep Connection Alive message.

Testing the Oracle Connection

The **Test Oracle** button allows you to check the validity of the database name, login and username you entered.

If these data are valid, then the following message appears next to the **Test Oracle** button: ‘OK’.

If the login name or password is invalid, then a message box appears with the following message: ‘ORA-01017: invalid username/password; logon denied’.

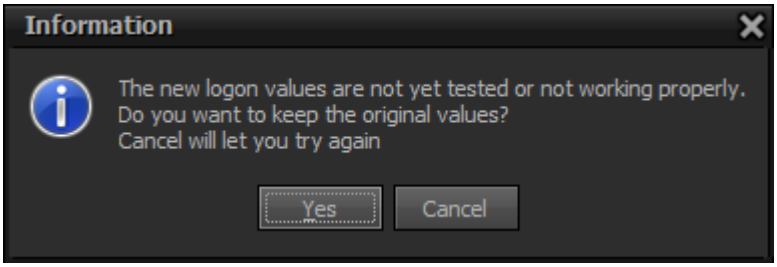
If the database name is invalid, then a message box appears with the following message: ‘ORA-12154:TNS: could not resolve the connect identifier specified’.

If you omit the password, then a message box appears with the following message: ‘ORA-01005: null password given; logon denied’.

If you do not enter a database name, login and username, then a message box appears with the following message: ‘ORA-12560: TNS: protocol adapter error’.

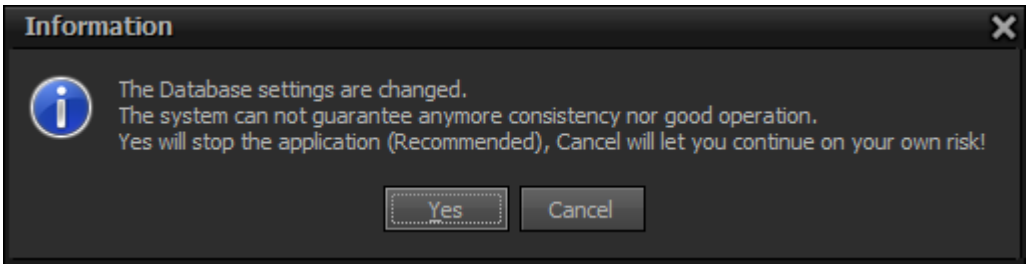
You can also check the software version of the application by clicking the **Test Oracle** button. If the software version is up-to-date, then the following message appears: 'Current– The Current Version'. If the software version is outdated, then the following message appears: 'Unknown Version Application! Please contact the EDP department.'

If you close the Settings window without testing the validity of the database name, login and username you just entered, then a message box appears.


Information
The new logon values are not yet tested or not working properly.
Do you want to keep the original values?
Cancel will let you try again
Yes
Cancel

If you click **Yes**, then the Settings window is closed and the original values are restored. If you click **Cancel**, then the Settings window does not close and you can test the values by clicking the **Test Oracle** button.

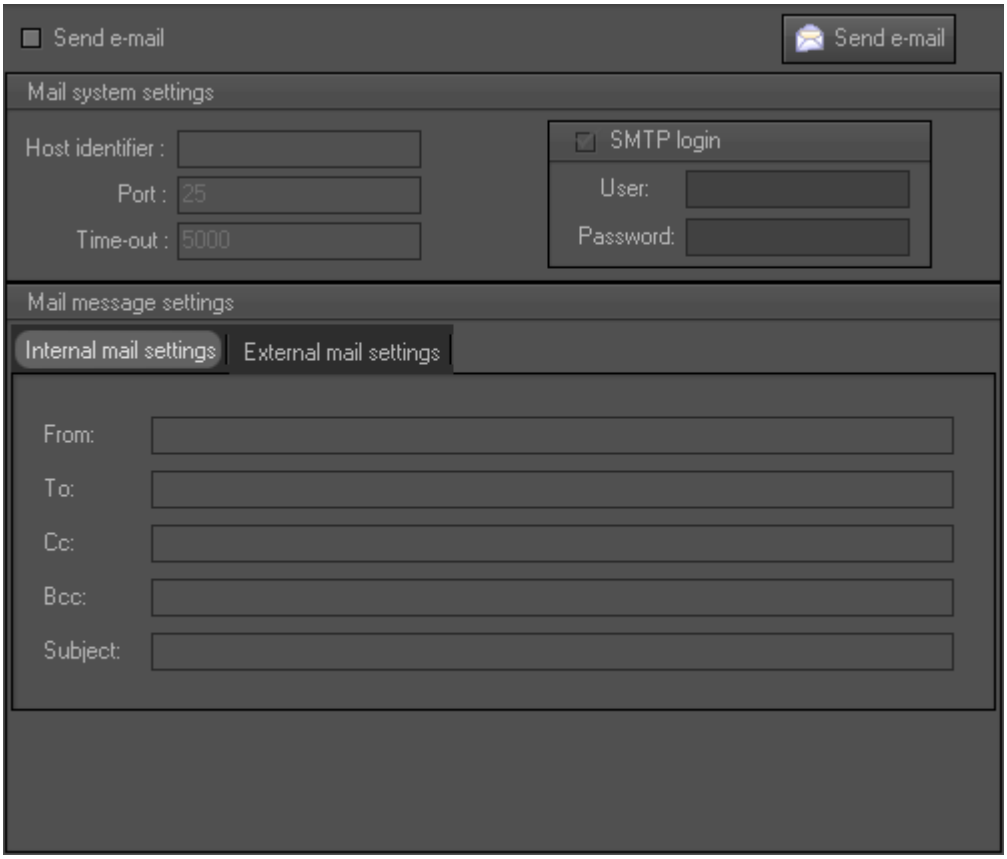
If you change the current database settings, test the connection and then close the Settings window, a message box will appear.


Information
The Database settings are changed.
The system can not guarantee anymore consistency nor good operation.
Yes will stop the application (Recommended), Cancel will let you continue on your own risk!
Yes
Cancel

If you click **Yes**, the application is stopped and closed. A manual restart will be required. Click **Cancel** to continue.

7.3.3. E-Mail Options Tab

In case the application is capable of sending e-mail messages, the E-Mail Options tab will allow you to configure an e-mail account, enter the e-mail address of the default sender and recipients, and enter a default e-mail subject. If the application is not capable of sending e-mail messages, the settings in this tab cannot be used.



To be able to configure the e-mail account, you have to select the **Send E-Mail** check box. The fields in the Mail System Settings and Mail Message Settings group box become available.

Configuring an E-Mail Account

In the Mail System Settings group box you have to enter the IP address and port number of the SMTP server and specify a timeout. In the SMTP Login group box you can enter a user name and password.

Configuring a Default E-Mail Message

The Mail Message Settings group box contains two tabs: Internal Mail Settings and External Mail Settings.

The Internal Mail Settings tab can be used to configure a default e-mail message that will be sent to the EVS developers and the customer when an error occurs.

The External Mail Settings tab can be used to configure a default e-mail message that will be sent to the customer to notify him about an error. In each tab you have to enter the sender's email address, the email address of the various recipients and a subject. It should be noted that this tab is not always used.

When you insert multiple e-mail addresses in any of the header fields, make sure you separate them by a comma.

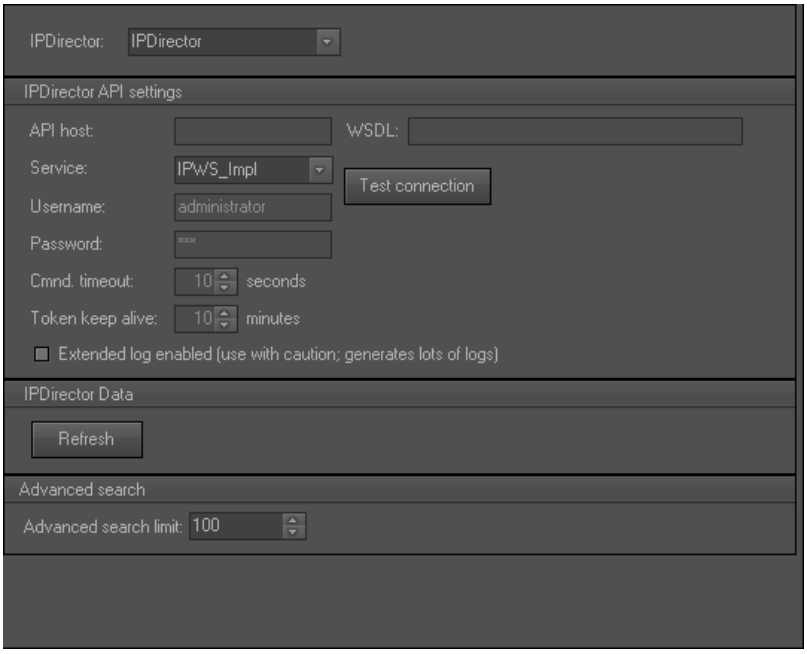
To test the settings and manually send an e-mail message, click the **Send Mail** button.

For the new settings to take effect, close and restart the application. Check the TOM.ini file in the `AppData\Roaming\EVS Broadcast Equipment\MAD\[Application]` folder for the e-mail addresses and subject entered here.

7.3.4. IPDirector API Tab

The IPDirector API tab contains the settings that configure the connection with the IPDirector API.

Most of these settings are read-only. They can only be configured in the Configurator application.



Selecting the IPDirector Instance

If your setup has multiple IPDirectors, you have to select the right IPDirector from the **IPDirector** field. The corresponding API connection settings will appear. If your setup has only one IPDirector, it will be automatically selected. The API settings related to the IPDirector instance will appear.

Configuring the Connection with the IPDirector API

NEW !

The IPDirector API Settings group box contains the data the application needs to be able to communicate with the IPDirector API:

- **API Host**: The IP address or hostname of the server that hosts the IPDirector API.
- **WSDL**: The path to the IPDirector API .wsdl file. This path is automatically calculated on the basis of the IP address of the server that hosts the IPDirector API.
- **Service**: The service through which the IPDirector API can be approached. This service is configured in IPDirector.
- **Username**: The username necessary to log into the IPDirector API.
- **Password**: The password necessary to log into the IPDirector API.

A **Test Connection** button is provided allowing you to test the connection with the IPDirector API. If all data is correct, the message 'Connected' will appear. Otherwise, the message 'Connection Failed' will appear.

The **Cmnd. Timeout** field contains the number of seconds the application will wait while IPDirector attempts to execute a command, before canceling the attempt and generate an error. By default, a time interval of 10 seconds is set.

By default, the API maintains a session for 1 hour. After a period of no activity, the session expires automatically. The **Token Keep Alive** field contains a time interval after which the session timeout is reset to prevent the session from timing out. By default, this is after 10 minutes.

If the option **Extended Log Enabled** is selected, additional information will be inserted in the application logs. For example, the API messages and parameters sent by the SOAP API client (= the application). By default, this option is not selected.

If the option **Trace Enabled** is selected, even more detailed information will be inserted in the application logs. For example, the entire SOAP messages sent between the SOAP API client (= the application) and the SOAP API server (= IPDirector API). By default, this option is not selected.

Refreshing the IPDirector Data

The **Refresh** button allows you to retrieve from the Configurator the latest IPDirector API connection data, the latest archive metadata profile and userfields and the latest archive and restore bins.

Configuring the IPDirector Advanced Search

Deep Archive Sync searches the IPDirector database for clips using IPDirector API calls. Multiple API calls are necessary to be able to retrieve all clips. In the Advanced Search tab you specify the maximum number of clips that should be returned with each IPDirector API call. By default, this is set to 100 clips. This setting is read-only and can only be modified in the Configurator application.

7.3.5. IP2Archive Bins Tab

Deep Archive Sync will check the status of the clips in the archive and restore process bins in IPDirector. If the status of these clips changes because of the synchronization process, it will move the clips to the bin that corresponds to their new status.

This tab displays the archive and restore process bins in IPDirector that are scanned by Deep Archive Sync.

These settings are read-only. They can only be configured in the Configurator application.

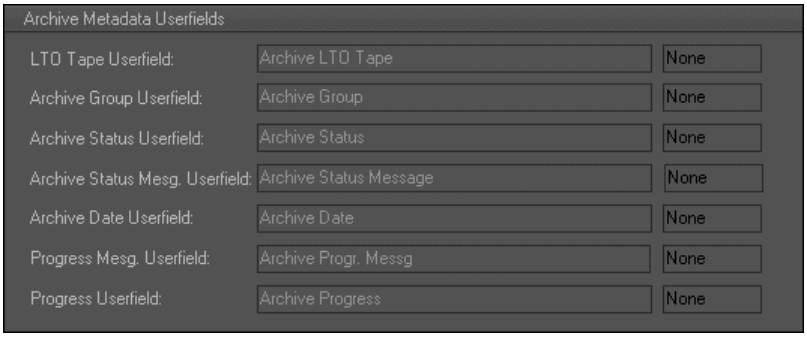
Archive Process Bins
Request Archive Bin: /IP2Archive/Archive/0_Requested
Archive In Process Bin: /IP2Archive/Archive/1_In Process
Archived Bin: /IP2Archive/Archive/2_Archived
Archiving Failed Bin: /IP2Archive/Archive/3_Failed
Archiving Rejected Bin: /IP2Archive/Archive/4_Rejected
Subclip Generation Bin: /IP2Archive/Creation/0_SubClipGenerate
Restore Process Bins
Request Restore Bin: /IP2Archive/Restore/0_Requested
Restore In Process Bin: /IP2Archive/Restore/1_In Process
Restored Bin: /IP2Archive/Restore/2_Restored
Restore Failed Bin: /IP2Archive/Restore/3_Failed
Restore Rejected Bin: /IP2Archive/Restore/4_Rejected

7.3.6. IP2Archive Metadata Tab

Deep Archive Sync will compare and synchronize the archive metadata of particular clips in the IP2Archive database with the archive metadata of these clips in the IPDirector or DIVArchive database. This archive metadata is linked to these clips in IPDirector by means of specific userfields. For example, Archive Status, Archive Progress, etc. The userfields are linked to one or more metadata profiles.

The IP2Archive Metadata tab displays the name of the userfields whose content Deep Archive Sync has to update. The type of each userfield is also displayed, for example text, combo box, date.

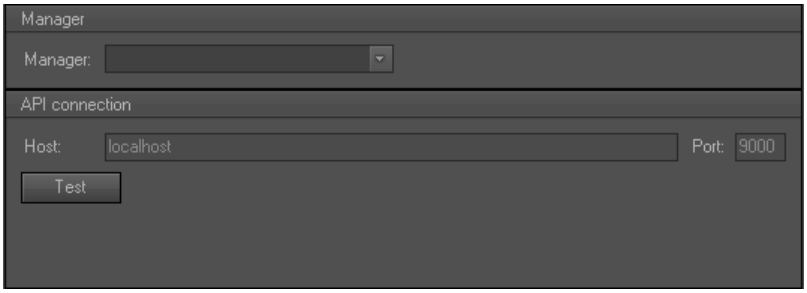
The userfields cannot be changed. They have been configured in the Configurator application.


Archive Metadata Userfields
LTO Tape Userfield: Archive LTO Tape None
Archive Group Userfield: Archive Group None
Archive Status Userfield: Archive Status None
Archive Status Mesg. Userfield: Archive Status Message None
Archive Date Userfield: Archive Date None
Progress Mesg. Userfield: Archive Progr. Messg None
Progress Userfield: Archive Progress None

7.3.7. DIVA Tab

The DIVA tab contains the settings that configure the connection with the DIVA API.

These settings are read-only and can only be modified in the Configurator application.



In the **Manager** field, the name of the DIVA Manager is selected Deep Archive Sync has to communicate with through the DIVA API.

In the API Connection group box the IP address and port number of the machine on which the DIVA API is running are displayed.

A **Test** button is provided to test the connection with the DIVA API.

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